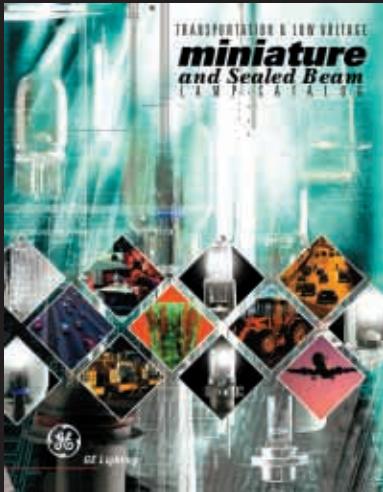


TRANSPORTATION & LOW VOLTAGE  
***miniature***  
and Sealed Beam  
LAMP CATALOG



*GE Lighting*



## INTRODUCTION

GE sealed beam and miniature lamps are designed for those applications requiring specific size, long life, and a competitive cost. These lamps are available with a wide variety of filament constructions, bases and wire terminal leads. Most are designed for operation on low-voltage power sources such as battery-generator systems, dry cell or storage batteries, or transformers. Manufacturers and designers of equipment requiring lamps should select lamps of established design whenever possible for maximum economy as well as ease of replacement through regular trade channels.

### Finding a lamp

In this catalog, lamps are listed two ways for quick reference. The index lists lamps numerically on pages 5-18. The final section, pages 23-49, groups lamps alphabetically "B" to "T", by bulb size. Lamps are listed in ascending order of design volts within the particular group.

### Ordering

Use the order code located in the left columns of the index on pages 5-18 or 23-49. Be sure to order from the correct quantity column, i.e. blister pack, unit pack, bulk pack. Miniature unit packs come in quantities of 10-50 lamps. Sealed beam unit package quantities are 6-12. Bulk standard package quantity is provided to simplify ordering. See Sales Offices for specific information.

### Formulas

The following are commonly used formulas to assist any calculations you may need. For further information, contact your GE Lamp Representative.

- Watts = Volts x Amps
- Lumens =  $12.57 \times \text{Mean Spherical Candlepower}$
- Hot Resistance (Ohms) = Volts/Amps
- Kelvin = Celsius + 273
- Footcandles = Candlepower/Distance squared (miniature lamps only)

### Abbreviations

The abbreviations used in this catalog include:

A	Amperes	Fl.	Flanged	Sc.	Screw
ANSI	American National Standards Institute	HID	High Intensity Discharge	S.C.	Single Contact
Bay.	Bayonet	HIR	Halogen Infrared	Spec.	Special
C.I.M.	Construction & Industrial Machinery	LCL	Light Center Length	Tel.	Telephone
C.P.	Candlepower	Min.	Miniature	Term.	Terminals
Cand.	Candelabra	MOL	Maximum Overall Length	V	Volts
D.C.	Double Contact	MSCP	Mean Spherical Candlepower	W	Watts
ECE	European Common Market (European Motor Vehicle Standards)	Nom.	Nominal		
PAR	Parabolic Aluminized Reflector	Pf.	Prefocus		
SAE	Society of Automotive Engineers (US Motor Vehicle Standards)				

### GE Miniature Lamp Prefixes

DE	Double Ended
H	Halogen
K	Krypton Gas
PC	Printed Circuit Application

PR Prefocus Base (E.G., "Flashlight Lamp")

Q Quartz Halogen

SE Single Ended

W,T,R,C,P European Designation

### GE Miniature Lamp Suffixes

A	Amber
AF	All Frost (on outside)
AS10	Ages and Selected (for candlepower)
B	Blue
C1	Refers to a range of current on telephone lamps (A1, B1, D1, E1, etc. used also)
CW	Cool White (aircraft lighting)
D	Lead Wires Down
E	Extended Lead Wires
E-1	Different lead wire material (NI plated)
G	Green
HD	Heavy Duty
HIR	Halogen Infrared
HO	High Output
K	Unique Base
KR	Krypton Fill
L, XL, LL	Long Life
MB	Miniature Bayonet

NA Natural Amber (automotive lighting)

PSB Pilot Indicator/Short Base

R Red

SB Silver Bowl (all or some portion of bulb is silver)  
TY Letters after a quartz halogen lamp mean a deviation from the standard lamp - usually refers to the electrical terminals

U Lead wires up or no base, e.g., unbased sealed beam lamp

WW Warm White (aircraft lighting)

X Indicates some arbitrary deviation from the normal product

Y Yellow

-1 Slip on terminals

-2 Represents various deviations

-3 Represents deviations (e.g. combination terminal)

W European Designation (Watts)

## Table of Contents

Introduction .....	2
Finding a lamp .....	2
Ordering .....	2
Formulas .....	2
Abbreviations .....	2
GE Miniature Lamp Prefixes .....	2
GE Miniature Lamp Suffixes .....	2
Important Notice .....	3
Glossary of Headings .....	3
Lamp Locator .....	4
Numerical Index .....	5-18
Miniature .....	5-14
Neon Glow .....	14
Sealed Beam .....	14-18
European Automotive Cross Reference .....	18
Halogen Cycle Lamps	
Information .....	19
Design Features .....	19
Miniature Lamps	
Design Features .....	20-21
Filaments & Bases .....	22
Specifications .....	23-41
Central Discharge Lamps	
Specifications .....	41
Neon Glow Lamps	
Specifications .....	42
Festoon Type, Auto & Special Service Lamps	
Specifications .....	42
Sealed Beam Lamps	
Bulbs, Filaments, & Bases .....	43
Specifications .....	44-49
Safety Notes .....	50
International Sales Offices .....	51
U.S. Sales Offices .....	Back Cover

### The Quality Vision

*It is the goal of GE lighting to be the world leader in quality - without exception. We can attain this goal by manufacturing and delivering products and services that faithfully conform to our specifications and satisfy the needs and expectations of our customers. Accordingly, we commit ourselves to expect, achieve and accept only those things that are done with excellence.*

## Important Notice

This catalog contains accumulated data to March 2003. Additional information is constantly being uncovered through research and testing, which may modify the data given herein. This is particularly true of newer lamps. Accordingly, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. For the latest lamp design data and information, contact your GE Lamp Representative.

The data and suggested applications contained in this catalog, as well as any additional information our representative may be able to furnish, are for general information only and are not intended and should not be taken as representations or warranties as to the suitability of a lamp for any particular application or use in any particular equipment, nor are our representatives authorized to make any such warranties. Applications and conditions of use are many and varied, and beyond our control. We cannot possibly have the same degree of knowledge that the purchaser has with respect to the design of his equipment and the conditions of its use. Therefore, it is up to the purchaser to make his own determination as to the suitability of a lamp for his intended application or use and to assume the responsibility for that determination.

General Electric desires to supply the best possible products at all times. For this reason, General Electric reserves the right to make changes in its products, and to introduce new lamps or discontinue existing ones without notice.

### Glossary of Headings

The following glossary of terms can help you when checking lamp specifications and when ordering products.

**Approximate Total Spread to 10% Maximum Candlepower:** Beam size expressed in degrees vertical and horizontal.

**Atmosphere:** Indicates whether the lamp is gas filled or vacuum. Gas filled lamps are more efficient than vacuum lamps.

**Average Cold Resistance:** The average resistance of an unburned lamp.

**Base:** Bases provide electrical contact to the lamp and, in most cases, also support the lamp in the fixture. (Complete diagrams of miniature bases are located on page 22. Sealed beam base diagrams can be found on page 43.)

**Bulb:** The prefix letter refers to the bulb shape, and the number is the approximate diameter in eighths of an inch. For example T-2 means approximately  $\frac{3}{8}$ " inch or  $\frac{1}{4}$ " diameter.

**Circuit Volts AC or DC:** The operational voltage range.

**Design End Foot Candles:** The measure of the portion of the total light output of a T-2 lamp that passes through a .250" orifice placed at the end of the lamp.

**Design Volts:** Voltage at which the lamp is designed to provide the amperes, candlepower and laboratory life characteristics.

**Design Watts or Amps:** The power consumption (watts) or current rating (amps) at the design voltage. In the case of dual-filament lamps, the values for each filament are given.

**Figure Number:** Corresponds to the lamp drawing. The drawing shows the correct bulb and base; but not the filament, for the lamp listed.

**Filament Designation:** Filaments may be straight wire (S), a coil (C) or a coiled coil (CC). The number denotes the arrangement of the filament on the supports. Complete diagrams of miniature filaments are located on page 22. Sealed beam filament diagrams can be found on page 43.

**Initial Maximum Beam Candlepower:** The maximum light intensity at a point in the beam.

**Lamp Number:** In nearly all cases lamps are marked with a General Electric Trade Number recorded with the American National Standards Institute. See glossary of prefixes and suffixes on page 2.

**Light Center Length:** Indicates the location of the filament with reference to the lamp base. The LCL is measured from the geometric center of the light source to a particular point of the base. This point is shown on the lamp drawing.

**Line Number:** Line number on specified page where the lamp can be found.

**Maximum Overall Length:** The dimension which includes the bulb and base is designated as the overall length of the lamp. In the case of wire terminal lamps, this dimension applies only to the glass portion.

**Mean Spherical Candlepower:** Initial mean spherical candlepower at the design voltage. Mean spherical candlepower is the generally accepted method of rating the total light output of miniature lamps. To convert this rating to lumens, multiply it by 12.57 (4 pi).

**Nominal Current:** This is the average expected current.

**Nominal Watts:** This is the average expected watts.

**Order code:** Use this code when ordering to ensure that you receive the exact product you require.

**Page Number:** Page number on which further specifications/illustrations can be found.

**Primary Application:** Current major uses of lamp. Lamps may be and are used in many other applications where their designs will permit. This column also lists any unique features of the lamp.

**Rated Average Lab Life:** Rated average life is that obtained in closely controlled laboratory testing of lamps at their design voltage. It is not necessarily the same as service life; shocks, vibration, voltage fluctuations, temperature, and other environmental influences may result in a shorter service life.

**SAE Specifications:** Specifications for headlamps (forward lighting) can be found in a SAE Ground Vehicle Lighting Standards Manual SAE HS-34. There are numerous test points in the beam patterns for headlamps in conjunction with minimum and maximum photometry values. Space does not permit these many test points to be included in the light distribution column. Please contact your GE Representative for more detailed information.

**Series Resistance:** In order to properly control the neon glow lamp current, a ballast resistor must be used. Lamps having screw bases have the necessary resistor built-in. Those having bayonet bases do not have a built in resistor. The tables show the value of the external resistor to be used for normal operation at indicated circuit volts, or the value of the built-in resistor where applicable.

# LAMP LOCATOR

The lamps listed here are not to scale. To determine the diameter of a bulb in inches, multiply the bulb number by one-eighth. For example T-2 means approximately  $\frac{3}{8}$ " or  $\frac{1}{4}$ " diameter.

Bulb	Page	Bulb	Page	Bulb	Page	Bulb	Page		
B-3½	23	S-8	26-30	TL-2¾	33	T-4	38		
B-6	23				33-34		38		
G-3½	23-24				38-39		38-39		
			30		39-40		39-40		
G-4½	24				34		40		
			31				40		
G-5	24				31				41
			31		31-32		41		41
G-6	25				31		42		42
			31-32		37		42		42
R-12	26								
			32		32				
RP-11	26								
			32						

Sealed Beam drawings can be found on page 43

**INDEX – MINIATURE LAMPS**

Order Code			Bulk Std.	Lamp No.	Bulb	Base	Design		Mean Spherical Candlepower (Approx.)	Rated Avg. Lab Life (Hours)	Page No.	Line No.
Blister Pack	Unit Pack	Bulk Pack	Pkg. Qty.				Volts	Watts or Amps				
12325	12756	25379	1000	<b>6PSB</b>	T-2	Tel. Slide #5	6.0	.14A	—	20,000	31	19
	25312			<b>10</b>	G-3½	Miniature Two Pin	2.50	.50A	.5	3,000	23	22
	25319			<b>12</b>	G-3½	Miniature Two Pin	6.30	.15A	.35	5,000	23	24
	12760			<b>12PSB</b>	T-2	Tel. Slide #5	12.0	.17A	—	12,000	31	20
	25331			<b>13</b>	G-3½	Miniature Screw	3.70	.30A	.98	15	23	23
	25354			<b>14</b>	G-3½	Miniature Screw	2.47	.30A	.5	15	23	21
	25371			<b>15</b>	G-4½	Miniature Two Pin	7.0	.40A	2	500	24	10
	25377			<b>19</b>	G-3½	Miniature Two Pin	14.40	.10A	.9	1,000	23	27
	17853			<b>24</b>	T-2¾	Wedge	14.0	.24A	2	1,500	32	21
	29001			<b>24E2</b>	T-2	Tel. Slide #3	24.0	.035A	—	7,000	31	21
12316	<b>24NA</b>	13689	4000	<b>24PSB</b>	T-2¾	Wedge	14.0	.24A	1.5	1,500	32	22
	12071			<b>27</b>	T-2	Tel. Slide #5	24.0	.073A	—	10,000	31	22
	25388			<b>28MB</b>	G-4½	Miniature Screw	4.9	.30A	1.4	30	24	6
	12761			<b>28PSB</b>	T-2½	Miniature Bayonet	28.0	.04A	.29	5,000	32	12
26480	12072	25552	4000	<b>37</b>	T-2	Tel. Slide #5	28.0	.04A	—	5,000	31	23
	39220			<b>43</b>	T-1¾	Wedge	14.0	.09A	.5	2,500	31	9
	25442			<b>44</b>	T-3¼	Miniature Bayonet	2.5	.50A	.5	3,000	34	8
	25450			<b>47</b>	T-3¼	Miniature Bayonet	6.3	.25A	.9	3,000	34	16
	25485			<b>48C2</b>	T-3¼	Miniature Bayonet	6.3	.15A	.52	3,000	34	12
	29041			<b>48PSB</b>	T-2	Tel. Slide #3	48.0	.035A	—	5,000	31	24
	12075			<b>51</b>	T-2	Tel. Slide #5	48.0	.05A	—	10,000	31	25
	25529			<b>52</b>	G-3½	Miniature Bayonet	7.50	.22A	1	1,000	23	25
	25550			<b>53</b>	G-3½	Miniature Bayonet	14.4	.12A	1	1,000	24	1
	25576			<b>55</b>	G-4½	Miniature Bayonet	7.0	.41A	2	500	24	11
23218	25591	25593	4000	<b>57</b>	T-2½	Miniature Bayonet	14.0	.24A	2	500	24	12
	12076			<b>60MB</b>	T-2½	Miniature Bayonet	60.0	.05A	.73	7,500	32	13
	12077			<b>60PSB</b>	T-2	Tel. Slide #5	60.0	.05A	—	7,500	31	26
12321	<b>63</b>	25654	1000	<b>64</b>	G-6	S.C. Bayonet	7.0	.63A	3	1,000	25	4
	25643			<b>67</b>	G-6	D.C. Bayonet	7.0	.63A	3	1,000	25	5
12324	25652	25654	1000	<b>68</b>	G-6	S.C. Bayonet	13.5	.59A	4	5,000	25	10
	25692			<b>70</b>	T-1¾	Wedge	13.5	.59A	4	5,000	25	11
23015	43606	43607	4000	<b>73</b>	T-1¾	Wedge	14.0	.08A	.3	15,000	31	5
	39218			<b>74</b>	T-1¾	Wedge	14.0	.10A	.7	1,000	31	10
21029	38457	38458	4000	<b>81</b>	G-6	S.C. Bayonet	6.5	1.02A	6	500	25	2
	25751			<b>82</b>	G-6	D.C. Bayonet	6.5	1.02A	6	500	25	3
	40969			<b>85</b>	T-1¾	Wedge	28.0	.04A	.3	7,000	31	12
	40967			<b>86</b>	T-1¾	Wedge	6.3	.20A	.4	20,000	31	3
	25772			<b>88</b>	S-8	D.C. Bayonet	6.8	1.91A	15	300	27	9
	12363			<b>89</b>	G-6	S.C. Bayonet	13.0	.58A	6	750	25	6
	47797			<b>89KR*</b>	G-6	S.C. Bayonet	13.0	.58A	6	1,500	25	7
	12364			<b>90</b>	G-6	D.C. Bayonet	13.0	.58A	6	750	25	8
	25794			<b>93</b>	S-8	S.C. Bayonet	12.8	1.04A	15	700	27	11
	25811			<b>94</b>	S-8	D.C. Bayonet	12.8	1.04A	15	700	27	12
12322	25836	18618	1000	<b>97</b>	G-6	S.C. Bayonet	13.5	.69A	4	5,000	25	13
	16287			<b>98</b>	G-6	S.C. Bayonet	13.0	.62A	6	800	25	9
	36147			<b>105</b>	B-6	S.C. Bayonet	12.8	1.00A	12	500	23	18
	25848			<b>112</b>	TL-3	Miniature Screw	1.2	.22A	—	5	34	5
	12078			<b>120MB</b>	T-2½	Miniature Bayonet	120.0	.025A	.36	7,500	32	14
	12080			<b>120PSB</b>	T-2	Tel. Slide #5	120.0	.025A	—	7,500	31	27
	25916	15731	1000	<b>147</b>	T-3¼	Wedge	7.0	.43A	2	1,500	34	20
	25927			<b>149</b>	T-3¼	Wedge	6.15	.53A	3.5	15	34	11
23016	25931	25933	4000	<b>157</b>	G-6	Miniature Screw	5.8	1.10A	8.1	50	25	1
	25956			<b>158</b>	T-3¼	Wedge	14.0	.24A	2	500	36	3
	16489			<b>161</b>	T-3¼	Wedge	14.0	.19A	1	4,000	35	28

\*New lamp added since last publication. **Turquoise-Halogen Lamps**

## INDEX – MINIATURE LAMPS

Blister Pack	Unit Pack	Bulk Pack	Pkg. Qty.	Lamp No.	Bulb	Base	Design		Mean Spherical Candlepower (Approx.)	Rated Avg. Lab Life (Hours)	Page No.	Line No.
							Volts	Watts or Amps				
12327	25962	16302	4000	<b>168</b>	T-3 <sup>1</sup> / <sub>4</sub>	Wedge	14.0	.35A	3	1,500	36	19
47827				<b>168XL*</b>	T-3 <sup>1</sup> / <sub>4</sub>	Wedge	14.0	.35A	3	3,000	36	20
	19553	19852	4000	<b>193</b>	T-3 <sup>1</sup> / <sub>4</sub>	Wedge	14.0	.33A	2	15,000	36	15
		19921	4000	<b>193E</b>	T-3 <sup>1</sup> / <sub>4</sub>	Wedge, Wire Terminal	14.0	.33A	2	15,000	36	16
		11807	4000	<b>193E-1</b>	T-3 <sup>1</sup> / <sub>4</sub>	Wedge, Wire Terminal	14.0	.33A	2	15,000	36	17
12328	25965	16303	4000	<b>194</b>	T-3 <sup>1</sup> / <sub>4</sub>	Wedge	14.0	.27A	2	2,500	36	6
12356				<b>194B</b>	T-3 <sup>1</sup> / <sub>4</sub>	Wedge	14.0	.27A	2	2,500	36	7
12357				<b>194G</b>	T-3 <sup>1</sup> / <sub>4</sub>	Wedge	14.0	.27A	2	2,500	36	8
12319	44859	27470	4000	<b>194NA</b>	T-3 <sup>1</sup> / <sub>4</sub>	Wedge	14.0	.27A	1.5	2,500	36	9
47794				<b>194NAXL*</b>	T-3 <sup>1</sup> / <sub>4</sub>	Wedge	14.0	.27A	1.5	5,000	36	10
12355		21618	4000	<b>194R</b>	T-3 <sup>1</sup> / <sub>4</sub>	Wedge	14.0	.27A	2	2,500	36	11
25832				<b>194XL</b>	T-3 <sup>1</sup> / <sub>4</sub>	Wedge	14.0	.27A	2	12,000	36	12
	37983	37984	500	<b>198</b>	S-8	D.C. Index	12.8	2.25A	32	1,200	29	7
							14.0	.59A	3	5,000		
	37985	37986	500	<b>199</b>	S-8	S.C. Bayonet	12.8	2.25A	32	1,200	29	8
	25988			<b>210</b>	B-6	D.C. Bayonet	6.5	1.78A	15	100	23	14
12673	39224	11803	1000	<b>211-2</b>	T-3	Miniature Cap	12.8	.97A	12	1,000	33	12
23220		11806	1000	<b>212-2</b>	T-3	Miniature Cap	13.5	.74A	6	2,000	33	18
40135	39356	11804	1000	<b>214-2</b>	T-3	Miniature Cap	13.5	.52A	4	1,000	33	16
	26008			<b>222</b>	TL-3	Miniature Screw	2.25	.25A	—	5	34	6
	26063			<b>243</b>	TL-3	Miniature Screw	2.33	.27A	—	10	34	7
	26095			<b>258</b>	G-4 <sup>1</sup> / <sub>2</sub>	Miniature Screw	14.0	.27A	1.6	500	24	13
	26099			<b>259</b>	T-3 <sup>1</sup> / <sub>4</sub>	Wedge	6.3	.25A	.65	5,000	34	17
	44719			<b>265</b>	G-3 <sup>1</sup> / <sub>2</sub>	Miniature Bayonet	28.0	.08A	.75	5,000	24	4
	42758			<b>267</b>	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	6.3	.15A	.33	5,000	34	13
	32688			<b>293</b>	G-4 <sup>1</sup> / <sub>2</sub>	Miniature Bayonet	14.0	.33A	2	7,500	24	15
	26112			<b>301</b>	G-5	S.C. Bayonet	28.0	.17A	3	500	24	18
	26120			<b>302</b>	G-5	D.C. Bayonet	28.0	.17A	3	500	24	19
	26127			<b>303</b>	G-6	S.C. Bayonet	28.0	.30A	6	500	25	20
	26136			<b>304</b>	G-6	D.C. Bayonet	28.0	.30A	6	500	25	21
	26143			<b>305</b>	S-8	S.C. Bayonet	28.0	.51A	15	300	29	16
	26145			<b>305AF</b>	S-8	S.C. Bayonet	28.0	.51A	—	300	29	17
	26152			<b>306</b>	S-8	D.C. Bayonet	28.0	.51A	15	300	29	18
	26157			<b>307</b>	S-8	S.C. Bayonet	28.0	.67A	21	300	30	5
	26161			<b>307AF</b>	S-8	S.C. Bayonet	28.0	.67A	21	300	30	6
	26168			<b>308</b>	S-8	D.C. Bayonet	28.0	.67A	21	300	30	7
	26171			<b>308AF</b>	S-8	D.C. Bayonet	28.0	.67A	—	300	30	8
	26175			<b>309</b>	S-11	S.C. Bayonet	28.0	.90A	32	300	30	22
	26191			<b>311</b>	S-11	S.C. Bayonet	28.0	1.29A	50	300	30	23
	26212	26214	4000	<b>313</b>	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	28.0	.17A	3.5	500	37	4
	26238			<b>315</b>	S-8	S.C. Bayonet	28.0	.90A	32	300	30	13
	26243			<b>316</b>	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	6.0	.70A	3.4	500	34	10
	28519			<b>327</b>	T-1 <sup>3</sup> / <sub>4</sub>	S.C. Midget Flanged	28.0	.04A	.34	4,000	31	13
	28546			<b>328</b>	T-1 <sup>3</sup> / <sub>4</sub>	S.C. Midget Flanged	6.0	.20A	.34	1,000	31	2
	28567			<b>330</b>	T-1 <sup>3</sup> / <sub>4</sub>	S.C. Midget Flanged	14.0	.08A	.5	1,500	31	6
	28588			<b>334</b>	T-1 <sup>3</sup> / <sub>4</sub>	Midget Grooved	28.0	.04A	.34	4,000	31	14
	26255			<b>356</b>	G-3 <sup>1</sup> / <sub>2</sub>	Miniature Bayonet	28.0	.17A	3.5	500	24	5
	28653			<b>381</b>	T-1 <sup>3</sup> / <sub>4</sub>	S.C. Midget Flanged	6.3	.20A	.4	20,000	31	4
	28657			<b>382</b>	T-1 <sup>3</sup> / <sub>4</sub>	S.C. Midget Flanged	14.0	.08A	.3	40,000	31	7
	28660			<b>385</b>	T-1 <sup>3</sup> / <sub>4</sub>	S.C. Midget Flanged	28.0	.04A	.15	10,000	31	15
	28662			<b>386</b>	T-1 <sup>3</sup> / <sub>4</sub>	Midget Grooved	14.0	.08A	.3	40,000	31	8
	28664			<b>387</b>	T-1 <sup>3</sup> / <sub>4</sub>	S.C. Midget Flanged	28.0	.04A	.3	7,000	31	16
	28672			<b>388</b>	T-1 <sup>3</sup> / <sub>4</sub>	Midget Grooved	28.0	.04A	.3	7,000	31	17
	38918			<b>400</b>	T-3 <sup>1</sup> / <sub>4</sub>	Wedge	28.0	.10A	1.6	1,000	37	2
	26354			<b>425</b>	G-4 <sup>1</sup> / <sub>2</sub>	Miniature Screw	5.0	.50A	2.3	15	24	7

\*New lamp added since last publication. [Turquoise-Halogen Lamps](#)

**INDEX – MINIATURE LAMPS**

Order Code			Bulk Std.	Lamp No.	Bulb	Base	Design		Mean Spherical Candlepower (Approx.)	Rated Avg. Lab Life (Hours)	Page No.	Line No.
Blister Pack	Unit Pack	Bulk Pack	Pkg. Qty.				Volts	Watts or Amps				
	26441			456	G-4½	Miniature Bayonet	28.0	.17A	2	5,000	24	16
	39645			464	T-3½	Wedge	28.0	.17A	3	1,500	37	5
	26460			502	G-4½	Miniature Screw	5.1	.15A	.6	100	24	8
	26485			509K	G-6	Candelabra Screw	24.0	.18A	2.8	1,000	25	17
	44773	44774	4000	555	T-3½	Wedge	6.3	.25A	.9	3,000	34	18
	38269			558	TL-3½	Wedge	13.0	.33A	—	500	37	11
12358	39746	11820	1000	561	T-3	Rigid Loop	12.8	.97A	12	1,000	33	13
23019		11822	1000	562	T-3	Rigid Loop	13.5	.74A	6	2,000	33	19
26205		11825	1000	563	T-3	Rigid Loop	13.5	.52A	4	1,000	33	17
12672				570	T-4¾	Rigid Loop	12.8	2.10A	32	600	38	18
23020				577	T-4¾	Double End Cap	12.8	1.40A	21	1,000	38	17
	18442	18439	4000	590	T-3½	Wedge	13.5	.37A	4	2,000	35	23
	25199	25200	4000	591	T-3½	Wedge	14.0	.24A	2	3,000	36	4
	26549			605	G-4½	Miniature Screw	6.15	.50A	3.4	15	24	9
	26561	26563	1000	623	G-6	S.C. Bayonet	28.0	.37A	6	1,000	25	22
	26567	26568	1000	624	G-6	D.C. Bayonet	28.0	.37A	6	1,000	25	23
23023	26570			631	G-6	S.C. Bayonet	14.0	.63A	6	1,000	25	16
	38866			656	T-3½	Wedge	28.0	.06A	.62	2,500	36	28
	38196			657	T-3½	Wedge	28.0	.08A	.62	15,000	36	30
	39999	40000	4000	658	T-3½	Wedge	14.0	.08A	0.31	15,000	35	26
		28706	1000	685	T-1	Sub-Midget Flanged	5.0	.06A	.05	40,000	31	1
	43132			705	S-8	S.C. Bayonet	28.0	.51A	15	900	29	19
	26591			755	T-3½	Miniature Bayonet	6.3	.15A	.33	20,000	34	14
	26593			756	T-3½	Miniature Bayonet	14.0	.08A	.31	15,000	35	27
	26599			757	T-3½	Miniature Bayonet	28.0	.08A	.62	15,000	37	1
	11014			767	T-2½	Miniature Bayonet	6.0	2.00A	19	50	32	1
	11250			773	T-2¾	G-4 Two Pin	12.0	.67A	10	1,000	32	16
	12723	12724	500	774	T-2½	G-4 Two Pin	12.0	.67A	13	50	32	4
		47618	500	777	T-2½	G-4 Two Pin	4.0	1.20A	5.5	275	31	28
	49718			778	T-2¾	G-4 Two Pin	6.0	3.33A	32	100	32	15
	18344			780	T-2¾	G-4 Two Pin	12.0	10W	12	2,000	32	17
	44840	44841	500	782	T-2¾	G-4 Two Pin	12.0	1.66A	25	2,000	32	19
	44500	44501	500	783	T-2½	G-4 Two Pin	12.0	1.00A	22	50	32	5
	43760	43761	500	784	T-2½	G-4 Two Pin	6.0	1.00A	9	50	31	29
	43762	43763	500	785	T-2½	G-4 Two Pin	6.0	1.33A	13	50	31	30
	43764	43765	500	786	T-2½	G-4 Two Pin	6.0	2.00A	19	50	32	2
	43115	43116	500	787	T-2½	G-4 Two Pin	6.0	1.67A	16	100	31	31
	43117	43118	500	788	T-2½	G-4 Two Pin	6.0	3.33A	32	100	32	3
	43119			789	T-2¾	G-4 Two Pin	12.0	1.17A	22	200	32	18
	43121	43122	500	790	T-2¾	G-4 Two Pin	14.0	1.79A	42	200	32	23
	43123	43124	500	791	T-2¾	G-4 Two Pin	14.0	2.50A	61	200	32	24
	20469			795	T-4	S.C. Bayonet	12.8	50W	108	200	38	3
12320	40848	14132	540	862	T-3½	Right Angle Prefocus	12.8	2.93A	60	1,900	35	6
		20904	540	880 (H27W/1)	T-3½	Axial Prefocus / PG13	12.8	2.10A	43	300	34	23
							13.5	29W	38	150		
		27582	540	880L*	T-3½	Axial Prefocus	12.8	2.10A	43	300	34	24
		14694	540	880X	T-3½	Axial Prefocus	12.8	2.10A	43	1,000	34	25
12334		20905	540	881 (H27W/2)	T-3½	Right Angle Prefocus / PGJ13	12.8	2.10A	43	300	35	1
							13.5	29W	38	150		
		27583	540	881L*	T-3½	Right Angle Prefocus	12.8	2.10A	43	1,000	35	2
		11646	540	881X	T-3½	Right Angle Prefocus	12.8	2.10A	43	300	35	3
	13158	13161	1000	882	T-2½	Printed Circuit Socket	12.8	.35A	3.8	2,000	32	6
	18167	16772	500	882X	T-2½	G-4 Two Pin	12.8	.35A	3.8	2,000	32	7
12335		20907	540	885	T-3½	Axial Prefocus	12.8	3.90A	100	200	35	14
14689		20909	540	886	T-3½	Right Angle Prefocus	12.8	3.90A	100	200	35	15

\*New lamp added since last publication. Turquoise-Halogen Lamps

**INDEX – MINIATURE LAMPS**

Order Code			Bulk Std.	Lamp No.	Bulb	Base	Design		Mean Spherical Candlepower (Approx.)	Rated Avg. Lab Life (Hours)	Page No.	Line No.
Blister Pack	Unit Pack	Bulk Pack	Pkg. Qty.				Volts	Watts or Amps				
		25639	540	887	T-3 1/4	Axial Prefocus	12.8	3.90A	95	400	35	16
		25703	540	888	T-3 1/4	Right Angle Prefocus	12.8	3.90A	95	400	35	17
12336		20910	540	889	T-3 1/4	Right Angle	12.8	2.10A	43	300	35	4
12337		20911	540	890	T-3 1/4	Axial	12.8	2.10A	43	300	35	5
12308	15246	15248	500	891	T-2 1/4	G-4 Two Pin	12.8	.63A	11	500	32	9
	16481			892	T-3 1/4	Axial	12.8	1.25A	28	300	34	22
12338		20913	540	893	T-3 1/4	Axial Prefocus	12.8	2.93A	75	200	35	7
		12727	540	893X	T-3 1/4	Axial Prefocus	12.8	2.93A	75	200	35	8
22112	20238	18455	540	894	T-3 1/4	Right Angle Prefocus	12.8	2.93A	75	200	35	9
		26345	540	894X*	T-3 1/4	Right Angle Prefocus	12.8	2.93A	75	200	35	10
22113		20914	540	896	T-3 1/4	Right Angle Prefocus	12.8	2.93A	75	200	35	11
		12271	540	898	T-3 1/4	Right Angle Prefocus	12.8	2.93A	60	1,900	35	12
22111		12272	540	899	T-3 1/4	Axial Prefocus	12.8	2.93A	60	1,900	35	13
14273		14007	1000	901	T-5	Wedge	12.8	.31A	2.9	500	39	16
40675				901A*	T-5	Wedge	12.8	.31A	-	500	39	17
23024	40462	40463	1000	904	T-5	Wedge	13.5	.69A	4	5,000	40	3
12366	40289	40290	1000	906	T-5	Wedge	13.0	.69A	6	1,000	39	25
		48505	1000	906A*	T-5	Wedge	13.0	.69A	-	1,000	39	26
	44754	44755	1000	908	T-5	Wedge	6.0	1.50A	12	50	39	14
	44756	44757	1000	909	T-5	Wedge	6.0	.62A	3	50	39	11
12365	40504	40505	1000	912	T-5	Wedge	12.8	1.00A	12	1,000	39	21
	44769			914	T-5	Wedge	4.0	.90A	3.5	50	39	9
	44771	44772	1000	915	T-5	Wedge	12.0	.75A	11	50	39	15
23025	16289	16288	1000	916	T-5	Wedge	13.5	.54A	2	10,000	40	2
23026	21860			916NA	T-5	Wedge	13.0	.54A	1.5	10,000	39	24
40179	17837	14008	2000	918	T-5	Wedge	12.8	.56A	6.5	500	39	18
26199				920	T-5	Wedge	12.8	1.20A	10	1,200	39	22
12307	43374	11743	1000	921	T-5	Wedge	12.8	1.40A	21	500	39	23
23027	13274	13275	1000	922	T-5	Wedge	12.8	.98A	15	200	39	20
40180				923	T-5	Wedge	12.8	.91A	12.5	500	39	19
	13483			926	T-5	Wedge	4.0	1.80A	7.5	50	39	10
	13485	13486	1000	927	T-5	Wedge	6.0	1.20A	8	50	39	13
	16975	15285	1000	939	T-5	Wedge	6.0	.90A	5.4	50	39	12
12367	26709			1003	B-6	S.C. Bayonet	12.8	.94A	15	200	23	15
47800				1003KR*	B-6	S.C. Bayonet	12.8	.94A	15	400	23	16
12373	26726	26728	500	1004	B-6	D.C. Bayonet	12.8	.94A	15	200	23	17
	26775			1034	S-8	D.C. Index	12.8	1.80A	32	200	27	20
							14.0	.59A	3	5,000		
40134	32147			1062	RP-11	D.C. Bayonet	40.0	.92A	50	100	26	8
	26838			1073	S-8	S.C. Bayonet	12.8	1.80A	32	200	27	21
	26854			1076	S-8	D.C. Bayonet	12.8	1.80A	32	200	27	22
	37169			1096	S-8	D.C. Pf. (S)	6.0	4.50A	30	500	26	12
	26872			1129	S-8	S.C. Bayonet	6.4	2.63A	21	200	27	1
	26885			1133	RP-11	S.C. Bayonet	6.2	3.91A	32	200	26	5
12346	26903	26905	500	1141	S-8	S.C. Bayonet	12.8	1.44A	21	1,000	27	15
47802				1141KR*	S-8	S.C. Bayonet	12.8	1.44A	21	2,000	27	16
	26917	26919	500	1142	S-8	D.C. Bayonet	12.8	1.44A	21	1,000	27	17
	26945			1152	S-8	D.C. Bayonet	12.8	1.34A	21	500	27	13
12297				1154	S-8	D.C. Index	6.4	2.63A	21	200	27	2
							7.0	.75A	3	1,000		
	26955			1155	G-6	S.C. Bayonet	13.5	.59A	4	5,000	25	12
12344	26960	26962	500	1156	S-8	S.C. Bayonet	12.8	2.10A	32	1,200	27	23
23334		11666	500	1156KR	S-8	S.C. Bayonet	12.8	2.10A	32	2,400	27	24
21028	20248			1156NA	S-8	S.C. Bayonet	12.8	2.10A	24	1,200	27	25

\*New lamp added since last publication. **Turquoise–Halogen Lamps**

**INDEX – MINIATURE LAMPS**

Order Code			Bulk Std.	Lamp No.	Bulb	Base	Design		Mean Spherical Candlepower (Approx.)	Rated Avg. Lab Life (Hours)	Page No.	Line No.
Blister Pack	Unit Pack	Bulk Pack	Pkg. Qty.				Volts	Watts or Amps				
12294	26969	26971	500	<b>1157</b>	S-8	D.C. Index	12.8	.210A	32	1,200	27	26
							14.0	.59A	3	5,000		
23337				<b>1157KR</b>	S-8	D.C. Index	12.8	.210A	32	2,400	27	27
							14.0	.59A	3	10,000		
12310	26975	26976	500	<b>1157NA</b>	S-8	D.C. Index	12.8	.210A	24	1,200	27	28
							14.0	.59A	2.2	5,000		
47798				<b>1157NAKR*</b>	S-8	D.C. Index	12.8	.210A	24	2,400	27	29
							14.0	.59A	2.2	10,000		
	27004			<b>1176</b>	S-8	D.C. Bayonet	12.8	1.34A	21	300	27	14
							14.0	.59A	6	1,500		
	27021	27023	500	<b>1195</b>	RP-11	S.C. Bayonet	12.5	3.00A	50	300	26	6
				<b>1196</b>	RP-11	D.C. Bayonet	12.5	3.00A	50	300	26	7
	27026			<b>1203</b>	S-8	S.C. Bayonet	28.0	.71A	21	400	30	9
				<b>1224</b>	G-6	D.C. Bayonet	34.0	.16A	3.8	500	25	24
	39904			<b>1229</b>	S-8	D.C. Bayonet	40.0	.38A	15	400	30	20
				<b>1251</b>	G-6	S.C. Bayonet	28.0	.23A	3	2,000	25	18
	27092			<b>1252</b>	G-6	D.C. Bayonet	28.0	.23A	3	2,000	25	19
41755	22523			<b>1295NA</b>	S-8	S.C. Bayonet	12.5	3.00A	37	200	27	10
	12824			<b>1308</b>	B-6	S.C. Bayonet	28.0	.56A	16	2,000	23	20
	27118			<b>1309</b>	B-6	S.C. Bayonet	28.0	.52A	15	300	23	19
	32098			<b>1315</b>	G-5	S.C. Bayonet	2.5	1.00A	1.75	20	24	17
	34265			<b>1317</b>	B-6	S.C. Bayonet	6.00	.51A	3.4	100	23	13
	27150			<b>1383</b>	R-12	S.C. Bayonet	13.0	20W	—	300	26	1
	27154			<b>1385</b>	R-12	S.C. Bayonet	28.0	20W	—	300	26	3
	27159			<b>1388</b>	R-12	D.C. Bayonet	24.0	20W	—	500	26	2
	27179			<b>1408</b>	T-3 1/4	Miniature Bayonet	10.0	.13A	.85	250	34	21
	27193			<b>1434</b>	T-5	S.C. Bayonet	3.7	2.75A	11	100	39	8
12329	27207	27209	4000	<b>1445</b>	G-3 1/2	Miniature Bayonet	14.4	.135A	.7	2,000	24	2
							18.0	.15A	1.5	250		
	27252			<b>1449</b>	G-3 1/2	Miniature Screw	14.0	.20A	2	250	23	26
	27263			<b>1450</b>	G-3 1/2	Miniature Bayonet	24.0	.035A	.23	3,000	24	3
	28310			<b>1460</b>	S-8	D.C. Pf. (A)	6.5	2.75A	23	100	27	3
	37342	37343	500	<b>1460X</b>	S-8	D.C. Pf. (A)	6.5	2.75A	23	100	27	4
	27305			<b>1468</b>	S-8	D.C. Pf. (S)	6.0	4.50A	30	500	26	13
	42677			<b>1468X</b>	S-8	D.C. Pf. (S)	6.0	4.50A	30	500	26	14
	27356			<b>1487</b>	T-3 1/4	Miniature Screw	14.0	.20A	1.4	3,000	36	1
	27382			<b>1493</b>	S-8	D.C. Bayonet	6.5	2.75A	23	100	27	5
	27392			<b>1495</b>	T-4 1/2	Miniature Bayonet	28.0	.30A	6	500	38	15
	44842			<b>1495X</b>	T-4 1/2	Miniature Bayonet	28.0	.30A	6	500	38	16
	27431			<b>1561</b>	S-11	S.C. Pf. (B)	6.3	4.00A	24	1,500	30	21
	40943			<b>1591</b>	S-8	S.C. Bayonet	28.0	.61A	15	1,000	29	20
	40945			<b>1591AF</b>	S-8	S.C. Bayonet	28.0	.61A	—	1,000	29	21
	27439			<b>1594</b>	S-8	D.C. Bayonet	6.0	5.00A	36	250	26	15
	27461			<b>1612</b>	S-8	D.C. Bayonet	5.4	1.90A	10	1,000	26	9
	27472			<b>1619</b>	S-8	S.C. Bayonet	6.7	1.90A	15	500	27	8
	27488	27489	500	<b>1630</b>	S-8	D.C. Pf. (A)	6.5	2.75A	23	100	27	6
	27491			<b>1631X</b>	S-8	D.C. Pf. (A)	6.5	2.75A	23	100	27	7
	27496			<b>1634</b>	S-8	D.C. Pf. (A)	20.0	1.00A	24	200	29	15
	27504			<b>1638</b>	S-8	D.C. Bayonet	28.0	1.02A	32	500	30	18
	27529	27530	500	<b>1662</b>	S-8	D.C. Index	28.0	.93A	32	400	30	14
							28.0	.34A	6	1,000		
	27532			<b>1665</b>	S-8	S.C. Bayonet	28.0	.80A	21	1,000	30	11
	27533			<b>1665AF</b>	S-8	S.C. Bayonet	28.0	.80A	—	1,000	30	12
	27548			<b>1680</b>	S-8	S.C. Bayonet	6.0	4.10A	32	300	26	10
	33995			<b>1680X</b>	S-8	S.C. Bayonet	6.0	4.10A	32	300	26	11

\*New lamp added since last publication. **Turquoise–Halogen Lamps**

## INDEX – MINIATURE LAMPS

Order Code			Bulk Std.	Lamp No.	Bulb	Base	Design		Mean Spherical Candlepower (Approx.)	Rated Avg. Lab Life (Hours)	Page No.	Line No.
Blister Pack	Unit Pack	Bulk Pack	Pkg. Qty.				Volts	Watts or Amps				
12359	27557	27679	4000	1683	S-8	S.C. Bayonet	28.0	1.02A	32	500	30	19
	27566			1691	S-8	S.C. Bayonet	28.0	.61A	15	1,000	29	22
	27568			1691AF	S-8	S.C. Bayonet	28.0	.61A	—	1,000	29	23
	27571			1692	S-8	D.C. Bayonet	28.0	.61A	15	1,000	30	1
	27630			1777	S-8	S.C. Bayonet	12.8	1.52A	26	400	27	18
	27667			1813	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	14.4	.10A	.86	1,000	36	23
	27677			1815	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	14.0	.20A	1.4	3,000	36	2
	27688			1816	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	13.0	.33A	3	1,000	35	21
	27707			1818	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	24.0	.17A	3.3	250	36	25
	27711		1000	1819	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	28.0	.04A	.34	2,500	36	27
	27727			1820	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	28.0	.10A	1.6	1,000	37	3
	27749			1822	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	36.0	.10A	2.1	1,000	37	8
	27772			1828	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	37.5	.05A	.65	3,000	37	9
	27776			1829	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	28.0	.07A	1	1,000	36	29
	27804			1835	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	55.0	.05A	1.1	5,000	37	10
	27816			1843	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	28.0	.022A	.2	3,000	36	26
	27819			1847	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	6.3	.15A	.38	5,000	34	15
	27833		1000	1850	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	5.0	.09A	.25	1,500	34	9
	27862			1864	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	28.0	.17A	3	1,500	37	6
	27868			1866	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	6.3	.25A	.65	5,000	34	19
12331	40383			1873	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	28.0	.20A	3	7,000	37	7
	27889			1876	T-5	S.C. Bayonet	3.5	2.50A	6.5	2,000	39	7
	27907			1889	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	14.0	.27A	2	2,000	36	13
	27917			1891	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	14.0	.24A	2	500	36	5
	27927			1892	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	14.4	.12A	.75	1,000	36	24
	12332	27935	4000	1893	T-3 <sup>1</sup> / <sub>4</sub>	Miniature Bayonet	14.0	.33A	2	7,500	36	18
	12330	27945		1895	G-4 <sup>1</sup> / <sub>2</sub>	Miniature Bayonet	14.0	.27A	2	2,000	24	14
34021	34021	1939X		T-7	S.C. Bayonet	28.0	1.79A	70	300	40	12	
	28008	1940		T-7	S.C. Bayonet	14.0	3.57A	75	300	40	10	
	37034	1944		T-7	S.C. Bayonet	14.0	3.57A	75	300	40	11	
	18617	1946		T-3	Two Pin with Leads	28.0	250W	660	50	34	4	
	28011	1958		T-4	Tab	28.0	150W	250	300	38	11	
	39641	100	1962B	T-3	Wire Terminal	8.5	62W	110	50	33	4	
			12859	100	1962BG	T-3	Wire Terminals	8.5	62W	110	50	33
		100	1962DX	T-3	Wire Terminals	8.5	62W	80	150	33	6	
	44152		1962DZ	T-3	Wire Terminals	8.5	62W	80	150	33	7	
	13667		1962TY	T-3	Wire Terminals	8.5	62W	110	50	33	8	
	28034		1968	T-3	Double Slide	28.0	25W	15	500	33	20	
	28036		1970	T-3	Special Sleeve	28.0	100W	150	1,000	34	1	
	41938		1970X	T-3	Special Sleeve	28.0	100W	140	1,000	34	2	
	32780		1974	T-3	Wire Terminals	6.0	20W	10	10,000	33	2	
	38545		1978X	T-3	Special	10.0	100W	130	2,000	33	9	
	38627		1982	T-3	S.C. Bayonet	28.0	75W	110	1,000	33	22	
	21061		1982SP	T-3	S.C. Bayonet	28.0	75W	107	2,000	33	23	
	39718		1983	T-4	Two Pin	10.0	100W	130	2,000	38	1	
	44717		1986	T-4	Wire Terminal	28.0	250W	600	100	38	13	
					S.C. Prefocus Collar							
12326	47695		1987	T-4	D.C. Bayonet	28.0	150W	240	700	38	12	
	38535		1988	T-3	Special Wire Leads	10.0	100W	130	2,000	33	10	
	19280	500	2040	T-2 <sup>1</sup> / <sub>4</sub>	Wedge	12.8	.625A	10.5	500	32	8	
	12296		44760	2057	S-8	D.C. Index	12.8	2.10A	32	1,200	28	1
23339		18620	500	2057KR	S-8	D.C. Index	12.8	2.10A	32	2,400	28	2
							14.0	.48A	2	10,000		

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**INDEX – MINIATURE LAMPS**

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Blister Pack	Unit Pack	Bulk Pack	Pkg. Qty.				Volts	Watts or Amps				
12312	44763	44764	500	<b>2057NA</b>	S-8	D.C. Index	12.8	.210A	24	1,200	28	3
							14.0	.48A	1.5	5,000		
47799				<b>2057NAKR*</b>	S-8	D.C. Index	12.8	.210A	24	2,400	28	4
		12899	600	<b>2058U</b>	S-8	Wire Terminals	12.8	.210A	32	1,200	28	5
							14.0	.48A	2	5,000		
	26697			<b>2059*</b>	T-2½	Miniature Bayonet	12.0	.833A	9.1	4,000	32	10
	26698			<b>2059X*</b>	T-2½	Miniature Bayonet	12.0	.833A	8	4,000	32	11
	21494			<b>2074</b>	T-3	Wire Terminals	7.0	.25W	24	2,700	33	3
		28085	600	<b>2144</b>	S-8	Wire Terminals	12.8	.210A	32	1,200	28	6
		32701	500	<b>2155</b>	S-8	Wire Terminals	28.0	.93A	32	400	30	15
							28.0	.34A	6	1,000		
	34763			<b>2232</b>	S-8	S.C. Bayonet	28.0	.643A	18	2,000	30	2
	26702			<b>2232LL*</b>	S-8	S.C. Bayonet	28.0	.643A	18	4,000	30	3
	43134			<b>2232SB</b>	S-8	S.C. Bayonet	28.0	.643A	—	2,000	30	4
	36906			<b>2233</b>	S-8	S.C. Bayonet	28.0	.766A	21	2,000	30	10
		44964	1000	<b>2286D</b>	T-3¼	Wire Term Down	14.0	.35A	2.7	1,500	36	21
	28100			<b>2331</b>	RP-11	D.C. Pf. (S)	5.9	4.66A	32	400	26	4
							6.2	4.49A	32	400		
12298	16291	16290	500	<b>2357</b>	S-8	D.C. Index	12.8	2.20A	40	400	28	16
							14.0	.59A	3	5,000		
12299	15698	15699	500	<b>2357NA</b>	S-8	D.C. Index	12.8	2.20A	30	400	28	17
							14.0	.59A	2.2	5,000		
27560	18047			<b>2396</b>	S-8	S.C. Bayonet	12.8	2.23A	40	400	28	18
				<b>2397*</b>	S-8	D.C. Index	12.8	2.23A	40	400	28	19
		19792	100	<b>2556</b>	T-3	Two Pin	28.0	200W	525	50	34	3
		19566	100	<b>2586</b>	T-4	Two Pin with Insulation Leads	28.0	250W	600	100	38	14
		43805		<b>2604X</b>	TL-2¾	G-4 Two Pin	5.0	2.00A	—	5,000	33	1
	36508			<b>3011</b>	S-11	S.C. Bayonet	28.0	1.29A	44	1,000	30	24
12305	18389			<b>3057</b>	S-8	Plastic Wedge	12.8	2.10A	32	1,200	28	7
							14.0	.48A	2	5,000		
26378				<b>3057KR</b>	S-8	Plastic Wedge	12.8	2.10A	32	2,000	28	8
							14.0	.48A	2	10,000		
12313	18391			<b>3057NA</b>	S-8	Plastic Wedge	12.8	2.10A	24	1,200	28	9
							14.0	.48A	1.5	5,000		
	14689			<b>3078*</b>	T-3	Special	10.0	100W	95	4,500	33	11
23028				<b>3155</b>	S-8	Plastic Wedge	12.8	1.60A	21	1,500	27	19
12351	21863			<b>3156</b>	S-8	Plastic Wedge	12.8	2.10A	32	1,200	28	10
27565				<b>3156KR*</b>	S-8	Plastic Wedge	12.8	2.10A	32	2,000	28	11
12306	17172			<b>3157</b>	S-8	Plastic Wedge	12.8	2.10A	32	1,200	28	12
							14.0	.59A	3	5,000		
26377				<b>3157KR</b>	S-8	Plastic Wedge	12.8	2.10A	32	2,000	28	13
							14.0	.59A	3	10,000		
12314	17173			<b>3157NA</b>	S-8	Plastic Wedge	12.8	2.10A	24	1,200	28	14
							14.0	.59A	2.2	5,000		
26380				<b>3157NAKR</b>	S-8	Plastic Wedge	12.8	2.10A	24	2,000	28	15
							14.0	.59A	2.2	10,000		
14387	22525			<b>3357/3457</b>	S-8	Plastic Wedge	12.8	2.23A	40	400	29	1
							14.0	.59A	3	5,000		
26379				<b>3357KR/3457KR</b>	S-8	Plastic Wedge	12.8	2.23A	40	800	29	2
							14.0	.59A	3	10,000		
14388	22526			<b>3357NA/3457NA</b>	S-8	Plastic Wedge	12.8	2.23A	30	400	29	3
							14.0	.59A	2.2	5,000		

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## INDEX – MINIATURE LAMPS

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								Volts	Watts or Amps				
25834					<b>3496</b>	T-7	D.C. Index	12.8	2.10A	43	600	40	6
								14.0	.59A	3	5,000		
25835					<b>3497</b>	T-7	S.C. Bayonet	12.8	2.10A	45	600	40	7
25837					<b>3652</b>	T-3 1/4	Wedge	13.5	.37A	6	700	35	24
15657					<b>4157KR*</b>	S-8	Plastic Wedge	12.8	2.23A	32	3,600	29	5
								14.0	.59A	3	10,000		
47458					<b>4157NAKR*</b>	S-8	Plastic Wedge	12.8	2.23A	24	3,600	29	6
								14.0	.59A	2.2	10,000		
28154					<b>5004CW</b>	T-5	Miniature Pinless	A.C.	4W	—	7,500	41	1
28155					<b>5004WW</b>	T-5	Miniature Pinless	A.C.	4W	—	7,500	41	2
28160					<b>5008CW</b>	T-5	Miniature Pinless	A.C.	8W	—	7,500	41	7
28163					<b>5008WW</b>	T-5	Miniature Pinless	A.C.	8W	—	7,500	41	8
28168					<b>5013CW</b>	T-5	Miniature Pinless	A.C.	13W	—	7,500	41	11
28169					<b>5013WW</b>	T-5	Miniature Pinless	A.C.	13W	—	7,500	41	12
27367					<b>5104CW*</b>	T-5	Miniature Bi-Pin	A.C.	4W	—	7,500	41	3
28173					<b>5104WW</b>	T-5	Miniature Bi-Pin	A.C.	4W	—	7,500	41	4
12774					<b>5106CW</b>	T-5	Miniature Bi-Pin	A.C.	6W	—	7,500	41	5
33612					<b>5106WW</b>	T-5	Miniature Bi-Pin	A.C.	6W	—	7,500	41	6
27466					<b>5108CW*</b>	T-5	Miniature Bi-Pin	A.C.	8W	—	7,500	41	9
28175					<b>5108WW</b>	T-5	Miniature Bi-Pin	A.C.	8W	—	7,500	41	10
12775					<b>5113CW</b>	T-5	Miniature Bi-Pin	A.C.	13W	—	7,500	41	13
28178					<b>5113WW</b>	T-5	Miniature Bi-Pin	A.C.	13W	—	7,500	41	14
28926					<b>7387</b>	T-1 3/4	Bi-Pin M-23	28.0	.04A	.3	7,000	31	18
26200					<b>7440</b>	T-7	Wedge / 103 x 16DQ	13.5	1.85	37	300	40	8
26201	10014	1000			<b>7443</b>	T-7	Wedge / 103 x 16DQ	13.5	1.85	35	500	40	9
								13.5	0.4	3	1,000		
22432	22389	14542	200		<b>9003/HB2</b>	T-4 3/4	P43T-38	12.8	67W	119	150	39	5
								12.8	60W	72	800		
45470					<b>9003SB*</b>	T-4 3/4	P43T-38	12.8	67W	119	80	39	6
								12.8	60W	72	150		
18508	13382	18699	250		<b>9004/HB1</b>	T-4 3/4	Axial Plastic Prefocus	12.8	65W	95	150	38	19
								12.8	45W	55	320		
27561					<b>9004HO*</b>	T-4 3/4	Axial Plastic Prefocus	12.8	65W	95	150	38	20
								12.8	42W	56	640		
45471					<b>9004SB*</b>	T-4 3/4	Axial Plastic Prefocus	12.8	65W	95	40	38	21
								12.8	45W	56	200		
13993	11249	20559	250		<b>9004XL</b>	T-4 3/4	Axial Plastic Prefocus	12.8	65W	95	150	38	22
								12.8	47W	55	850		
18509	13384	14710	200		<b>9005/HB3</b>	T-4	Right Angle Plastic, Prefocus	12.8	65W	135	800	38	8
45472					<b>9005SB*</b>	T-4	Right Angle Plastic, Prefocus	12.8	65W	135	150	38	9
45866					<b>9005XSL*</b>	T-4	Axial Plastic Prefocus	12.8	65W	135	700	38	10
18510	13397	14711	200		<b>9006/HB4</b>	T-4	Right Angle Plastic, Prefocus	12.8	55W	80	850	38	4
47640					<b>9006HO*</b>	T-4	Right Angle Plastic, Prefocus	12.8	55W	80	1,000	38	5
45473					<b>9006SB*</b>	T-4	Right Angle Plastic, Prefocus	12.8	55W	80	320	38	6
45868					<b>9006XSLL*</b>	T-4	Axial Plastic Prefocus	12.8	55W	80	2,000	38	7
22388	20551				<b>9007/HB5</b>	T-4 3/4	Axial Plastic Prefocus	12.8	65W	107	150	39	1
								12.8	55W	79	1,100		
47642					<b>9007HO*</b>	T-4 3/4	Axial Plastic Prefocus	12.8	65W	107	150	39	2
								12.8	53W	80	320		
	10209	250			<b>9007LL</b>	T-4 3/4	Axial Plastic Prefocus	12.8	65W	107	150	39	3
								12.8	55W	79	1,450		
45474					<b>9007SB*</b>	T-4 3/4	Axial Plastic Prefocus	12.8	65W	107	110	39	4
								12.8	58W	80	250		
		360			<b>9011</b>	T-3 1/4	PX20D	12.8	65W	183	150	35	19
		900			<b>9011X HIR*</b>	T-3 1/4	PX20D	12.8	65W	183	150	35	20

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**INDEX – MINIATURE LAMPS**

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Blister Pack	Unit Pack	Bulk Pack	Pkg. Qty.				Volts	Watts or Amps				
		41495	360	<b>9012 (HIR2)*</b>	T-3½	PX 22D	12.8	.55W	135	900	35	18
40843		37735	200	<b>9145 (H10)*</b>	T-4	PY20D	12.8	.45W	65	1,500	38	2
40336	27328	32376	300	<b>50310/1 (H1-55)</b>	T-3½	P14.5S	13.2	.62W	123	225	37	17
		27569		<b>50320/1 (H1-70/28V)</b>	T-3½	P14.5S	28.0	.80W	151	600	37	27
12339	27331	22132	400	<b>50340 (H3-55)</b>	T-3½	PK22S	13.2	.62W	115	225	37	18
		23445	400	<b>50340HD (H3-55)</b>	T-3½	PK22S	13.2	.62W	111	600	37	19
		35044	400	<b>50340LL (H3-55)</b>	T-3½	PK22S	13.2	.64W	106	2,000	37	21
12339	27332	23438	400	<b>50350 (H3-70/28V)</b>	T-3½	PK22S	28.0	.75W	135	225	37	26
		23442	400	<b>50390 (H3-35)</b>	T-3½	PK22S	13.2	.40W	60	200	37	12
18132	27330	22130	400	<b>50410 (H2-55)</b>	T-3½	X511	13.2	.62W	143	225	37	20
	27334	22133	200	<b>50440 (H4-60/55)</b>	T-5	P43T-38	13.2	.71W	138	225	40	1
							13.2	.66W	80	900		
	27342	30833	200	<b>50450 (H4-75/70/28V)</b>	T-5	P43T-38	28.0	.80W	151	150	40	5
							28.0	.73W	95	300		
12341	27329			<b>52130 (H3-100)</b>	T-3½	PK22S	13.2	.92W	187	100	37	23
		23428	400	<b>52140 (H1-100)*</b>	T-3½	P14.5S	13.2	100W	219	100	37	24
				<b>52590HD (H3-65/28V)</b>	T-3½	PK22S	28.0	.66W	102	1,000	37	25
45591				<b>56110*</b>	T-3	Miniature Bayonet	13.2	.1.83A	40	100	33	14
26374		35755	200	<b>58520 (H7-55)</b>	T-3½	PX26D	13.2	.56.5W	115	500	37	16
47461				<b>58540*</b>	T-3	Miniature Bayonet	13.5	.37A	63	240	33	15
	26696			<b>A-103*</b>	T-3	Special	28.0	.50W	60	1,000	33	21
23312		30872		<b>C5W</b>	T-3½	SV8.5/8	13.5	.37A	3.6	450	42	4
		16124	144	<b>D2R*</b>	T-3	P32d-2	85	.35W	114	1,000	41	15
		15999	144	<b>D2S*</b>	T-3	P32d-2	85	.35W	254	1,000	41	16
25323				<b>DE3021</b>	T-2½	SV7MM	14.0	.24A	2	1,000	42	5
12353				<b>DE3022</b>	T-2½	SV7MM	13.0	.38A	3	1,000	42	6
12354	12084			<b>DE3175</b>	T-3½	SV8.5MM	13.0	.77A	9.55	400	42	7
	12085			<b>DE3425</b>	T-4	SV8.5MM	13.0	.77A	9.55	400	42	8
23324				<b>DE7576</b>	T-3½	SV8.5/8	13.5	.74A	9.8	200	42	9
		15765	300	<b>H8*</b>	T-3½	PGJ19-1	13.2	.40W	64	400	37	13
		15827	300	<b>H9*</b>	T-3½	PGJ19-5	13.2	.65W	167	125	37	22
		15828	300	<b>H11*</b>	T-3½	PGJ19-2	13.2	.55W	107	550	37	14
		15963	300	<b>H11LL*</b>	T-3½	PGJ19-2	13.2	.55W	107	1,400	37	15
22961				<b>KPR102</b>	B-3½	S.C. Miniature Flanged	2.4	.70A	1.3	15	23	4
23151				<b>KPR104</b>	B-3½	S.C. Miniature Flanged	2.2	.47A	.47	15	23	1
23153				<b>KPR113</b>	B-3½	S.C. Miniature Flanged	4.8	.75A	4.1	20	23	9
23154				<b>KPR118</b>	B-3½	S.C. Miniature Flanged	7.2	.55A	5.2	15	23	11
	12571			<b>ML20/ OF-28</b>	T-8	Disk	28.0	.20W	—	500	40	13
23306		11601	1000	<b>P21W (P25-1)</b>	S-8	S.C. Bayonet	13.5	.1.85A	36.6	250	29	12
		38655	1000	<b>P21W LL*</b>	S-8	S.C. Bayonet	13.5	.1.85A	36.6	300	29	13
27561		30857	1000	<b>P21/4W*</b>	S-8	D.C. Index	13.5	.1.85A	35	100	29	9
23303		11604	1000	<b>P21/5W (P25-2)</b>	S-8	D.C. Index	13.5	.1.85A	35	250	29	10
		92475	1000	<b>P21/5W LL*</b>	S-8	D.C. Index	13.5	.44A	2.78	1,000		
							13.5	.44A	2.78	3,000		
40778				<b>P21W 24V*</b>	S-8	S.C. Bayonet	28.0	.1.00A	36.6	150	30	17
		30856	1000	<b>P21/5W*</b>	S-8	D.C. Index	28.0	.1.00A	35	150	30	16
							28.0	.36A	3.18	1,500		
		23036	1000	<b>PC161</b>	T-3½	Printed Circuit Socket	14.0	.19A	1	4,000	35	29
27222	23037	1000		<b>PC168</b>	T-3½	Printed Circuit Socket	14.0	.35A	3	1,500	36	22
72221	23021	1000		<b>PC194</b>	T-3½	Printed Circuit Socket	14.0	.27A	2	2,500	36	14
12675	25181			<b>PR2</b>	B-3½	S.C. Miniature Flanged	2.38	.50A	.8	15	23	3

 \*New lamp added since last publication. **Turquoise–Halogen Lamps**

## INDEX – MINIATURE LAMPS

Blister Pack	Unit Pack	Bulk Pack	Pkg. Qty.	Lamp No.	Bulb	Base	Design		Mean Spherical Candlepower (Approx.)	Rated Avg. Lab Life (Hours)	Page No.	Line No.
							Volts	Watts or Amps				
12676	25193			<b>PR3</b>	B-3½	S.C. Miniature Flanged	3.57	.50A	1.5	15	23	6
12677				<b>PR4</b>	B-3½	S.C. Miniature Flanged	2.33	.27A	.4	10	23	2
	25222			<b>PR6</b>	B-3½	S.C. Miniature Flanged	2.47	.30A	.45	30	23	5
	25235			<b>PR7</b>	B-3½	S.C. Miniature Flanged	3.70	.30A	.9	30	23	7
12680	25252			<b>PR12</b>	B-3½	S.C. Miniature Flanged	5.95	.50A	3.1	15	23	10
12681	25262			<b>PR13</b>	B-3½	S.C. Miniature Flanged	4.75	.50A	2.2	15	23	8
	25289			<b>PR18</b>	B-3½	S.C. Miniature Flanged	7.20	.55A	5.5	3	23	12
41370		32648	500	<b>PY21W*</b>	S-8	S.C. Bayonet	13.5	1.85A	22.3	250	29	14
23314		30859	2000	<b>R5W LL</b>	G-6	S.C. Bayonet	13.5	5W	4.0	500	25	15
23322		35417	2000	<b>R10W LL</b>	G-6	S.C. Bayonet	13.5	10W	10.0	400	25	14
23318				<b>T4W</b>	T-2¾	Miniature Bayonet	13.5	.30A	2.8	450	32	20
27562		35030	2000	<b>W3W</b>	T-3¼	Wedge	13.5	3W	1.75	1,000	35	22
27563		37640	2000	<b>W5W</b>	T-3¼	Wedge	13.5	5W	4	300	35	25
		26353	1000	<b>W16W</b>	T-5	Wedge	13.5	1.44A	24.6	250	40	4

## INDEX – NEON GLOW LAMPS

Blister Pack	Unit Pack	Bulk Pack	Pkg. Qty.	Lamp No.	Bulb	Base	Design		Rated Avg. Lab Life (Hours)	Page No.	Line No.
							Volts	Watts or Amps			
12064				<b>B1A (NE-51)</b>	T-3½	Miniature Bayonet	105-125	.0003A	15,000	42	1
12065				<b>B2A (NE-51H)</b>	T-3½	Miniature Bayonet	105-125	.0012A	25,000	42	2
31675				<b>B7A (NE-45)</b>	T-4½	Candelabra Screw	105-125	.002A	7,500	42	3

## INDEX – SEALED BEAM LAMPS

Blister Pack	Unit Pack	Bulk Pack	Pkg. Qty.	Lamp No.	Bulb	Base	Design		Mean Spherical Candlepower (Approx.)	Rated Avg. Lab Life (Hours)	Page No.	Line No.
							Volts	Watts or Amps				
18511				<b>4000</b>	PAR46	3 Contact Lugs	12.8	37.5W	SAE	200	47	34
							12.8	60W		320		
18516	24231	672		<b>4001</b>	PAR46	2 Contact Lugs	12.8	37.5W	SAE	300	47	35
24327				<b>4013</b>	PAR46	Screw Terminals	6.4	25W	800	300	47	24
24339				<b>4014</b>	PAR36	Screw Terminals	6.4	18W	1,500	200	45	24
24369				<b>4019</b>	PAR46	Screw Terminals	6.2	30W	1,200	300	47	23
38418				<b>4040</b>	PAR46	3 Contact Lugs	12.8	37.5W	SAE	300	47	36
							12.8	60W		500		
39585	39586	60		<b>4042</b>	PAR36	Screw Terminals	6.4	12W	1,100	150	45	23
40588	40589	60		<b>4044</b>	PAR36	Screw Terminals	12.0	12W	1,100	150	45	29
10540	10541	60		<b>4044-1</b>	PAR36	Slip-on Terminals	12.0	12W	1,100	150	45	30
25051				<b>4313</b>	PAR36	Screw Terminals	13.0	250W	140,000	25	47	1
39366	39367	60		<b>4340</b>	PAR36	Slip-on Terminals	48.0	80W	2,500	400	47	22
39362	39363	60		<b>4350</b>	PAR36	Slip-on Terminals	36.0	60W	2,100	400	47	21
12961				<b>4402A</b>	PAR36	Screw Terminals	28.0	50W	1,000	400	47	4
24425	24423	60		<b>4405</b>	PAR36	Screw Terminals	12.8	30W	50,000	100	46	5
24430	24428	60		<b>4406</b>	PAR36	Screw Terminals	12.8	35W	600	300	46	11
24439				<b>4410</b>	PAR36	Screw Terminals	12.8	35W	600	300	46	12
24448	24443	60		<b>4411</b>	PAR36	Screw Terminals	12.8	35W	3,000	300	46	13
37889				<b>4411-1</b>	PAR36	Slip-on Terminals	12.8	35W	3,000	300	46	14
				<b>48032</b>	60	Combination	12.8	35W	3,000	300	46	15
24454	24453	24		<b>4412</b>	PAR46	Screw Terminals	12.8	35W	11,000	300	47	28
24460	24459	24		<b>4412A</b>	PAR46	Screw Terminals	12.8	35W	8,800	300	47	29
22981	24464	24		<b>4413</b>	PAR46	Screw Terminals	12.8	35W	1,100	300	47	30
24478	24477	60		<b>4414</b>	PAR36	Screw Terminals	12.8	18W	1,500	300	46	1
24487				<b>4414R</b>	PAR36	Screw Terminals	12.8	18W	275	300	46	2
22982				<b>4415</b>	PAR36	Screw Terminals	12.8	35W	9,000	300	46	16
24499	24497	60		<b>4415A</b>	PAR36	Screw Terminals	12.8	35W	7,000	300	46	17
22983	24503	60		<b>4416</b>	PAR36	Screw Terminals	12.8	30W	35,000	300	46	6
		34901	60	<b>4416-1</b>	PAR36	Slip-on Terminals	12.8	30W	35,000	300	46	7

\*New lamp added since last publication. **Turquoise-Halogen Lamps**

**INDEX – SEALED BEAM LAMPS**

Order Code			Bulk Std. Pkg. Qty.	Lamp No.	Bulb	Base	Design		Mean Spherical Candlepower (Approx.)	Rated Avg. Lab Life (Hours)	Page No.	Line No.
Blister Pack	Unit Pack	Bulk Pack					Volts	Watts or Amps				
				<b>4416A</b>	PAR36	Screw Terminals	12.8	30W	26,000	300	46	8
				<b>4416R</b>	PAR36	Screw Terminals	12.8	30W	4,000	300	46	9
		24525	24	<b>4419</b>	PAR46	Screw Terminals	12.8	35W	1,600	300	47	31
		24541	24	<b>4421</b>	PAR46	Slip-on Terminals	13.0	100W	23,000	300	48	11
				<b>4422</b>	PAR36	Screw Terminals	12.8	35W	600	300	46	18
				<b>4434A</b>	PAR46	Screw Terminals	12.8	40W	1,000	100	47	38
		24576	24	<b>4435</b>	PAR46	Screw Terminals	12.8	30W	75,000	100	47	27
				<b>4436</b>	PAR46	Screw Terminals	12.8	35W	60,000	300	47	32
	39932	39933	60	<b>4440X</b>	PAR36	3 Contact Lugs	12.8	40W	6,000	320	46	23
							12.8	40W	4,500	320		
				<b>4440X-1</b>	PAR36	3 Slip-on Terminals	12.8	40W	6,000	320	46	24
							12.8	40W	4,500	320		
	37046	37047	60	<b>4446</b>	PAR36	Screw Terminals	12.8	25W	400	300	46	4
				<b>4460X</b>	PAR36	3 Screw Terminals	12.8	40W	6,500	320	46	25
							12.8	40W	5,000	320		
				<b>4461</b>	PAR36	Screw Terminals	12.8	60W	6,000	300	46	31
				<b>4466</b>	PAR36	Screw Terminals	12.8	60W	1,000	300	46	32
				<b>4478</b>	PAR46	2 Contact Lugs	13.0	60W	1,600	800	48	8
				<b>4502</b>	PAR36	Screw Terminals	28.0	50W	10,000	400	47	5
	24640	24638	60	<b>4505</b>	PAR36	Screw Terminals	28.0	50W	45,000	400	47	6
				<b>4509</b>	PAR36	Screw Terminals	13.0	100W	110,000	25	46	34
				<b>4509X</b>	PAR36	Screw Terminals	13.0	100W	110,000	25	46	35
				<b>4509Y</b>	PAR36	Screw Terminals	13.0	100W	–	25	46	36
	24654	24653	60	<b>4510</b>	PAR36	Screw Terminals	6.4	25W	800	300	45	25
				<b>4511</b>	PAR36	Screw Terminals	6.2	30W	2,300	300	45	21
	24663	24661	60	<b>4515</b>	PAR36	Screw Terminals	6.4	30W	55,000	100	45	26
				<b>4516</b>	PAR36	Screw Terminals	6.2	30W	45,000	300	45	22
				<b>4519</b>	PAR36	Screw Terminals	13.0	100W	30,000	25	46	37
				<b>4522</b>	PAR46	Screw Terminals	13.0	250W	290,000	25	48	15
				<b>4530</b>	PAR46	Screw Terminals	26.0	5.3A	100,000	50	48	18
				<b>4531</b>	PAR46	Screw Terminals	12.5	40W	30,000	400	47	26
	19628			<b>4532</b>	PAR46	Screw Terminals	28.0	250W	75,000	100	48	25
							28.0	150W	14,500	100		
	24735	24733	24	<b>4535</b>	PAR46	Screw Terminals	6.4	30W	95,000	100	47	25
				<b>4537</b>	PAR46	Screw Terminals	13.0	100W	200,000	25	48	12
	40822	40823	24	<b>4537-2</b>	PAR46	Screw Terminals	13.0	100W	200,000	25	48	13
				<b>4537X</b>	PAR46	Screw Terminals	13.0	100W	200,000	25	48	14
				<b>4541</b>	PAR56	Screw Terminals	28.0	450W	470,000	25	49	10
				<b>4543</b>	PAR56	Screw Terminals	12.5	100W	250,000	50	49	3
				<b>4545</b>	PAR56	Screw Terminals	12.0	100W	225,000	100	49	2
	24780	24783	60	<b>4546</b>	PAR36	Screw Terminals	4.7	.5A	6,300	100	45	8
				<b>4546-1</b>	PAR36	Slip-on Terminals	4.7	.5A	6,300	100	45	9
				<b>4547</b>	PAR36	Screw Terminals	4.75	1.25A	20,000	100	45	10
				<b>4551</b>	PAR46	Screw Terminals	28.0	250W	75,000	25	48	26
				<b>4552</b>	PAR64	Screw Terminals	28.0	250W	500,000	25	49	11
				<b>4553</b>	PAR46	Screw Terminals	28.0	250W	300,000	25	48	27
				<b>4554</b>	PAR46	Screw Terminals	28.0	450W	90,000	25	48	29
				<b>4555</b>	PAR64	Screw Terminals	115.0	1,000W	600,000	25	49	19
				<b>4557</b>	PAR64	3 Screw Terminals	28.0	1,000W	540,000	25	49	17
							28.0	400W	100,000	100		
				<b>4559</b>	PAR64	Screw Terminals	28.0	600W	600,000	25	49	12
				<b>4570</b>	PAR46	Screw Terminals	28.0	150W	32,000	300	48	22
				<b>4571</b>	PAR46	Screw Terminals	28.0	150W	7,000	300	48	23
				<b>4572</b>	PAR46	Screw Terminals	28.0	150W	4,500	300	48	24
	25005	25007	24	<b>4578</b>	PAR46	2 Contact Lugs	28.0	60W	1,600	800	48	19

\*New lamp added since last publication. **Turquoise-Halogen Lamps**

## INDEX – SEALED BEAM LAMPS

Blister Pack	Unit Pack	Bulk Pack	Order Code	Bulk Std.	Pkg. Qty.	Lamp No.	Bulb	Base	Design		Mean Spherical Candlepower (Approx.)	Rated Avg. Lab Life (Hours)	Page No.	Line No.
									Volts	Watts or Amps				
			25009	25011	24	<b>4579</b>	PAR46	3 Contact Lugs	28.0	80W	24,000	400	48	21
			24859			<b>4580</b>	PAR46	Screw Terminals	28.0	60W	11,000	400	48	30
			24862			<b>4581</b>	PAR46	Screw Terminals	28.0	450W	400,000	10	48	31
			24853			<b>4582</b>	PAR46	Screw Terminals	28.0	450W	400,000	10	48	32
			24867			<b>4587</b>	PAR36	Screw Terminals	28.0	250W	40,000	25	47	19
			24873	24871	60	<b>4589</b>	PAR36	Screw Terminals	28.0	50W	5,000	400	47	7
				23509	60	<b>4589-1</b>	PAR36	Slip-on Terminals	28.0	50W	5,000	400	47	8
			24882			<b>4591</b>	PAR36	Screw Terminals	28.0	100W	90,000	25	47	12
			24887			<b>4593</b>	PAR36	Screw Terminals	28.0	50W	1,500	400	47	9
			24891			<b>4594</b>	PAR36	Screw Terminals	28.0	100W	70,000	300	47	13
			24892			<b>4595</b>	PAR36	Screw Terminals	28.0	100W	60,000	300	47	14
			24898			<b>4596</b>	PAR36	Screw Terminals	28.0	250W	150,000	25	47	20
			24964			<b>4626</b>	PAR36	Screw Terminals	28.0	150W	25,000	300	47	17
			24966			<b>4627</b>	PAR36	Screw Terminals	28.0	100W	3,000	300	47	15
			33284			<b>4635</b>	PAR46	Screw Terminals	16.5	450W	325,000	25	48	17
			19632	16407	672	<b>4636-3</b>	PAR46	Combination	14.0	80W	90,000	200	48	16
			18517	41861	576	<b>4651</b>	165mm	2 Contact Lugs	12.8	50W	SAE	200	44	21
			18518			<b>4652</b>	165mm	3 Contact Lugs	12.8	40W	SAE	200	44	17
									12.8	60W		320		
			39906	39907	60	<b>4700</b>	PAR36	3 Screw Terminals	13.0	100W	100,000	25	46	38
									13.0	100W	50,000	25		
			45427			<b>4713</b>	PAR36	Screw Terminals	28.0	150W	4,200	300	47	18
			44724			<b>4752</b>	PAR36	Screw Terminals	28.0	60W	2,000	800	47	11
			24973			<b>4800</b>	PAR56	3 Contact Lugs	28.0	50W	SAE	400	49	9
									28.0	40W		400		
			24980			<b>4811</b>	PAR36	3 Contact Lugs	28.0	110W	SAE	400	47	16
									28.0	55W		400		
			24981	24982	60	<b>4825R</b>	PAR36	3 Screw Terminals	28.0	50W	200	200	47	10
									28.0	18W	40	200		
			24995			<b>4880</b>	PAR46	2 Contact Lugs	28.0	60W	6,000	800	48	20
			45110	45111	576	<b>4912-1</b>	165mm	Slip-on Terminals	12.8	50W	14,000	300	44	22
				45113	16	<b>4913-1</b>	165mm	Slip-on Terminals	12.8	50W	1,350	400	44	23
			45116	16195	576	<b>4921-1</b>	165mm	Slip-on Terminals	13.0	100W	25,000	300	45	2
			11639			<b>5001*</b>	PAR46	2 Contact Lugs	12.8	50W	SAE	300	48	1
			16152			<b>5557</b>	PAR64	3 Screw Terminals	28.0	1,000W	540,000	50	49	18
									28.0	400W	100,000	100		
			25114			<b>6006</b>	PAR56	3 Contact Lugs	6.1	50W	SAE	300	49	1
									6.2	40W		500		
			18519			<b>6014</b>	PAR56	3 Contact Lugs	12.8	60W	SAE	320	49	5
									12.8	50W		150		
			38416	38607	432	<b>6015</b>	PAR56	3 Contact Lugs	12.8	50W	SAE	300	49	4
									12.8	50W		500		
			25153			<b>6045</b>	PAR56	Screw Terminals	26.0	170W	230,000	100	49	8
			18521			<b>6052</b>	200mm	3 Contact Lugs	12.8	65W	SAE	150	45	3
									12.8	55W		320		
			40190	40191	60	<b>7400</b>	PAR36	Slip-on Terminals	12.8	35W	33,000	300	46	19
				42385	60	<b>7400-1</b>	PAR36	Screw Terminals	12.8	35W	33,000	300	46	20
			39987	39988	60	<b>7414Y</b>	PAR36	Screw Terminals	12.8	18W	1,000	300	46	3
			41865	41866	60	<b>7613</b>	PAR36	Screw Terminals	6.0	8W	400	50	45	13
			45101	45102	60	<b>7613-1</b>	PAR36	Slip-on Terminals	6.0	8W	400	50	45	14
			11421	11422	60	<b>7672-1</b>	PAR36	Slip-on Terminals	6.0	7.2W	350	50	45	12
			<b>22386</b>			<b>H4351</b>	140mm	Right Angle, Plastic	<b>12.8</b>	<b>55W</b>	SAE	<b>500</b>	<b>44</b>	<b>3</b>
			<b>10211</b>			<b>H4351LH*</b>	140mm	Right Angle, Plastic	<b>12.8</b>	<b>55W</b>	—	<b>500</b>	<b>44</b>	<b>4</b>
			<b>22387</b>			<b>H4352</b>	140mm	Right Angle, Plastic	<b>12.8</b>	<b>65W</b>	SAE	<b>150</b>	<b>44</b>	<b>5</b>

\*New lamp added since last publication. Turquoise-Halogen Lamps

**INDEX – SEALED BEAM LAMPS**

Order Code			Bulk Std. Pkg. Qty.	Lamp No.	Bulb	Base	Design		Mean Spherical Candlepower (Approx.)	Rated Avg. Lab Life (Hours)	Page No.	Line No.
Blister Pack	Unit Pack	Bulk Pack					Volts	Watts or Amps				
		18350	48	<b>H4360</b>	140mm	2 Right Angle Lugs	12.8	37.5W	2,000	320	44	1
	15129			<b>H4405</b>	PAR36	Screw Terminals	12.8	30W	66,000	100	46	10
		17674	60	<b>H4460X</b>	PAR36	3 Screw Terminals	12.8	40W	11,000	320	46	26
							12.8	40W	8,500	320		
	15133			<b>H4515</b>	PAR36	Screw Terminals	6.4	30W	67,000	100	45	27
	18532	45027	576	<b>H4651</b>	165mm	2 Contact Lugs	12.8	50W	SAE	200	44	24
	46375			<b>H4651SB*</b>	165mm	2 Contact Lugs	12.8	50W	SAE	200	44	25
	18533	49810	576	<b>H4656</b>	165mm	3 Contact Lugs	12.8	35W	SAE	200	44	16
							12.8	35W	320			
	14753			<b>H4656HO</b>	165mm	3 Contact Lugs	12.8	40W	SAE	200	44	18
							12.8	55W	700			
	45475			<b>H4656SB*</b>	165mm	3 Contact Lugs	12.8	40W	SAE	75	44	19
							12.8	55W	200			
	18535	22879	576	<b>H4666</b>	165mm	3 Contact Lugs	12.8	65W	SAE	150	44	29
							12.8	55W	320			
	18536	48533	480	<b>H4701</b>	150mm	2 Lugs	12.8	65W	SAE	150	44	15
	18538	48534	480	<b>H4703</b>	150mm	2 Lugs	12.8	55W	SAE	320	44	14
	18522			<b>H5001</b>	PAR46	2 Contact Lugs	12.8	50W	SAE	200	48	2
	18523			<b>H5006</b>	PAR46	3 Contact Lugs	12.8	35W	SAE	200	47	33
							12.8	35W	320			
	19428	19559	432	<b>H5024</b>	PAR56	3 Contact Lugs	12.8	65W	SAE	400	49	6
							12.8	42W	2,000			
	19411	19556	576	<b>H5051</b>	165mm	2 Contact Lugs	12.8	50W	SAE	500	44	26
	19429	19558	448	<b>H5054</b>	200mm	3 Contact Lugs	12.8	65W	SAE	400	45	4
							12.8	42W	2,000			
	19412	19557	576	<b>H5062</b>	165mm	3 Contact Lugs	12.8	40W	SAE	400	44	20
							12.8	55W	2,000			
	41453	48		<b>H5360*</b>	140mm	2 Right Angle Lugs	12.8	37.5W	2,000	900	44	2
	18525			<b>H6024</b>	PAR56	3 Contact Lugs	12.8	65W	SAE	150	49	7
							12.8	35W	320			
	18534	11545	448	<b>H6054</b>	200mm	3 Contact Lugs	12.8	65W	SAE	150	45	5
							12.8	35W	320			
	14752			<b>H6054HO</b>	200mm	3 Contact Lugs	12.8	65W	SAE	150	45	6
							12.8	55W	700			
	45477			<b>H6054SB*</b>	200mm	3 Contact Lugs	12.8	65W	SAE	75	45	7
							12.8	55W	200			
	43561	43562	60	<b>H7550</b>	PAR36	Screw Terminals	6.0	8W	25,000	50	45	15
		23541	60	<b>H7550-1</b>	PAR36	Slip-on Terminals	6.0	8W	25,000	50	45	16
	43564	43565	60	<b>H7551</b>	PAR36	Screw Terminals	6.0	8W	550	50	45	17
	43567			<b>H7552</b>	PAR36	Screw Terminals	6.0	10W	650	50	45	18
	43570	43571	60	<b>H7553</b>	PAR36	Screw Terminals	6.0	12W	850	50	45	19
		43574	60	<b>H7554</b>	PAR36	Screw Terminals	6.0	20W	1,400	50	45	20
	44642	44643	60	<b>H7555</b>	PAR36	Screw Terminals	12.0	8W	550	50	45	28
	44924	44925	60	<b>H7556</b>	PAR36	Screw Terminals	6.0	6W	400	50	45	11
	12720	12721	60	<b>H7557</b>	PAR36	Screw Terminals	12.0	12W	850	50	45	31
	42841	42842	60	<b>H7600</b>	PAR36	Screw Terminals	12.8	37.5W	60,000	300	46	21
	43576	43577	60	<b>H7604</b>	PAR36	Screw Terminals	12.8	50W	100,000	100	46	27
	14616	43580	60	<b>H7606</b>	PAR36	Screw Terminals	12.8	50W	1,000	400	46	28
		17672	60	<b>H7607</b>	PAR36	Screw Terminals	12.8	65W	1,500	600	46	33
	14617	43583	24	<b>H7609</b>	PAR46	Screw Terminals	12.8	50W	2,200	400	48	3
	14618	43586	60	<b>H7610</b>	PAR36	Screw Terminals	12.8	50W	5,200	400	46	29
	49695			<b>H7612</b>	PAR46	Screw Terminals	12.8	37.5W	15,000	450	47	37
	49731	49732	60	<b>H7614</b>	PAR36	Screw Terminals	12.8	50W	2,000	100	46	30
	42838	42839	60	<b>H7616</b>	PAR36	Screw Terminals	12.8	37.5W	70,000	300	46	22
	14619	43589	24	<b>H7619</b>	PAR46	Screw Terminals	12.8	50W	6,000	400	48	4

\*New lamp added since last publication. Turquoise-Halogen Lamps

## INDEX – SEALED BEAM LAMPS

Order Code			Bulk Std.	Lamp No.	Bulb	Base	Design		Mean Spherical Candlepower (Approx.)	Rated Avg. Lab Life (Hours)	Page No.	Line No.
Blister Pack	Unit Pack	Bulk Pack	Pkg. Qty.				Volts	Watts or Amps				
2		45058	24	H7621-1	PAR46	Slip-on Terminals	12.8	50W	20,000	200	48	5
	43591	43592	24	H7635	PAR46	Screw Terminals	12.8	50W	160,000	100	48	6
		18022	24	H7635X	PAR46	Screw Terminals	12.8	50W	160,000	100	48	7
	17894	17890	24	H7680HIR	PAR46	Screw Terminals	13.0	80W	275,000	100	48	9
	26694	26695	24	H7680X HIR*	PAR46	Screw Terminals	13.0	80W	230,000	300	48	10
		23250	16	H7913HIR	165mm	2 Contact Lugs	12.8	65W	4,000	800	45	1
		13426	16	H7921-1	165mm	Slip-on Terminals	12.8	50W	23,900	200	44	27
	47460	14892	16	H7935-1	165mm	Slip-on Terminals	12.8	50W	175,000	100	44	28
	15767	15763	48	H9405	150mm	2 Right Angle Lugs	12.8	50W	100,000	100	44	8
	15769	15768	48	H9406	150mm	2 Right Angle Lugs	12.8	50W	1,350	400	44	9
	15771	15770	48	H9411	150mm	2 Right Angle Lugs	12.8	50W	5,400	400	44	10
		15772	48	H9414	150mm	2 Right Angle Lugs	12.8	50W	2,700	400	44	11
	16484	16483	48	H9415	150mm	2 Right Angle Lugs	12.8	37.5W	12,000	200	44	6
	17988			H9415A	150mm	2 Right Angle Lugs	12.8	37.5W	—	200	44	7
	16976	16978	48	H9420	150mm	2 Right Angle Lugs	12.8	50W	47,000	200	44	12
	16482			H9421	150mm	2 Right Angle Lugs	12.8	50W	4,000	200	44	13
	22109			Q4509	PAR36	Screw Terminal	13.0	100W	140,000	100	46	39
	37706			Q4554	PAR46	Screw Terminals	28.0	450W	65,000	100	48	33
	40579			Q4559	PAR64	Screw Terminals	28.0	600W	600,000	100	49	13
	42552			Q4559X	PAR64	Screw Terminals	28.0	600W	765,000	100	49	14
	41097			Q4566	PAR46	Screw Terminals	28.0	450W	150,000	1,000	48	34
	37372			Q4597	PAR46	Screw Terminals	28.0	450W	16,000	1,000	48	35
	40577			Q4629	PAR64	Screw Terminals	28.0	600W	20,000	1,000	49	15
	34537			Q4631	PAR36	Screw Terminals	13.0	250W	80,000	500	47	2
	39112			Q4632	PAR36	Screw Terminals	13.0	250W	75,000	500	47	3
	36271			Q4681	PAR46	Screw Terminals	28.0	450W	310,000	50	48	36
	41452			Q5551*	PAR46	Screw Terminals	28.0	250W	60,000	100	48	28
	16784			Q5559*	PAR64	Screw Terminals	28.0	600W	650,000	200	49	16

\*New lamp added since last publication. Turquoise–Halogen Lamps

## EUROPEAN AUTOMOTIVE CROSS-REFERENCE

In Europe, exterior automotive lamps are regulated by ECE Regulation 37, and other regulations particular to the application. Many other countries have adapted the ECE regulations. GE's global facilities produce a full line of ECE types in 6, 12, and 24 volts. Due to demand, not all types are currently stocked in North America; therefore, some types are not included in this catalogue. Call your GE sales office for further information.

In Europe, manufacturers do not have a common lamp number. Below is a cross reference of the most common 12 volt ECE types.

Many trucks built in Europe use 24 volt systems. Below is a cross reference of the most common 24 volt ECE types. Usage of these vehicles in North America is limited.

### 12V ECE REGULATION 37 TYPES

Application	ECE Type	Manufacturer Numbers			
		GE US	GE Europe	Osram	Philips
Headlamps & Foglamps	H1	50310/1	50310/1	64150	12258
	H2	50410	50410	64173	12311
	H3	50340	50340	64151	12336
	H4	50440	50440	64193	12342
	H7	H7	58520	64210	
	H27W/1	880			
	H27W/2	881			
	R2	1931	7951	12620	
Signaling	P21W†	P25-1	1057	7506	12498
	P21/5W	P25-2	1077	7528	12499
	P21/4W		1122	7225	12594
	PY21W <sup>2</sup>		1056	7507	12496
	R5W <sup>1</sup>	R5W	2619	5007	12821
	R10W <sup>†</sup>	R10W	2641	5008	12814
	T4W	T4W	2662	3893	12929
	C5W	C5W	7546	6418	12844
	W3W	W3W	5304	2821	12256
	W5W	W5W	5307	2825	12961
	W16W	W16W			

### 24V ECE REGULATION 37 TYPES

Application	ECE Type	Manufacturer Numbers			
		GE US	GE Europe	Osram	Philips
Headlamps & Foglamps	H1	50320/1	50320/1	64155	13258
	H2			64175	13311
	H3	50350	50350	64156	13336
	H4	50450	50450	64196	13342
	R2			7952	13620
Signaling	P21W <sup>†</sup>	1060	1060	7511	13498
	P21/5W		1078	7537	13499
	R5W <sup>†</sup>	2627	2627	5627	13821
	R10W <sup>†</sup>		2643	5637	13814
	T4W		2661	9930/3930	13929
	C5W		7552	6423	13844

<sup>†</sup>With SC Bayonet (Ba15s) Base

<sup>(1)</sup>With SC Bayonet (Ba15s) Base

<sup>(2)</sup>With (BAV 15s) Base

# HIGH OUTPUT HALOGEN-CYCLE LAMP INFORMATION

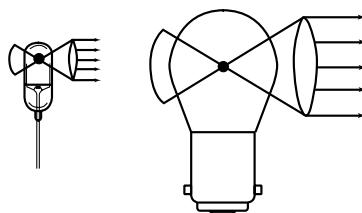
## Benefits of halogen-cycle lamps:

### Higher Light Output from Less Energy and a Smaller Lamp Package

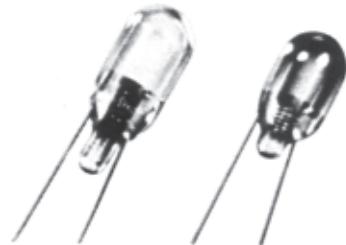
- Typical halogen-cycle miniature lamp rated at 45 watts produces as much light as a standard 60-watt household bulb... yet the halogen-cycle lamp is  $\frac{1}{6}$  the size of the household lamp.

### Higher Maintained Light Output Over Life

- Can be operated at high wattages without sacrificing the light output over life.
- Most halogen-cycle lamps produce 85 to 95% of their initial light output at 70% of their life expectancy.
- Bulb blackening due to tungsten deposits on the bulb wall virtually eliminated.



*Halogen-cycle lamp versus conventional incandescent lamp of equivalent wattage. Note the smaller size of the halogen lamp on the left.*



*Halogen-cycle lamp versus vacuum incandescent lamp at 70% lamp of life. Note the bulb blackening of the incandescent lamp on the right.*

### Available in Full Range of Types and Sizes

- GE halogen-cycle lamps are available in voltages ranging from 4 to 32.
- Candlepower ranges from 3.8 to 660.
- Lamp sizes range from 7.5mm subminiature to 16mm miniature diameters.
- Sockets for GE halogen-cycle lamps are commercially available from a number of manufacturers.\*

\* For Halogen Lamp Types see "Turquoise Lamp Number" in Miniature & Sealed Beam Lamp Specifications.

## HALOGEN LAMPS & SEALED BEAM - DESIGN FEATURES

### GE Manufactures Four Types of Halogen-Cycle Lamps:

#### Glass Halogen Miniature Lamps

- Increased range in candlepower and wattages of these halogen-cycle lamps allows for many new and current design applications.
- Lamp design consists of a hemispherical bulb top with more uniform light output than a top-tipped halogen lamp.
- Sturdy nickel-plated iron leads in two-pin types allow for positive electrical connection, minimizing voltage drops due to intermittent connections.
- Although these lamps can be damaged by thermal shock, they are not subject to devitrification.
- Electrical connections to lamps offered with molybdenum leads can be made by crimping or welding.

#### Quartzline® Fused-Quartz Miniature Lamps

- Normally used in special applications, but can also be used in many general applications if the designer chooses.
- Can withstand thermal shock - i.e. it will not crack or break even when suddenly exposed to water or ice.

#### Glass Halogen and Quartzline® Fused-Quartz Sealed Beam Lamps

- Designated in this catalog by the prefixes "H" and "Q".
- Can be used in many applications to take advantage of their higher light output compared with standard incandescent sealed beam lamps.
- Standard PAR36, PAR46, PAR56, PAR64 & rectangle 140mm, 150mm, 165mm & 200 mm sizes allow possible use in existing housings.
- Several different beam patterns are available for a variety of applications.

### Consider These Factors When Selecting GE Halogen-Cycle and High Wattage Lamps:

#### Lamp Efficacy and Operating Precautions.

Many lamps listed in this catalog are filled to high internal gas pressures to maximize lamp efficacy (candlepower or lumens per watt). Because both lamp bulb material and pressure vary by lamp design, different SAFETY notices apply. Be sure to read the appropriate notice(s) for the lamp(s) you select.

#### High Operating Temperatures

Because operating temperatures (watts plus environment) are critical to the effectiveness of the self-cleaning properties of halogen-cycle lamps, bulb wall temperatures should not go below 250°C. Hot spots on the bulb wall itself can go as high as 700°C in normal operation. Substantial heat is generated in all halogen-cycle lamps, so allowances should be made for the dissipation of excessive heat in equipment design. Certain lamps and extremely confined fixtures may require additional ventilation or heat sinking to ensure proper operation of the halogen cycle and prevent damage to the fixture. It is a good practice to test the lamp in the operating environment early in the design cycle to ensure adequate performance. Precautions must be taken in the selection of materials for lampholders, reflectors, and lamp housings because the 700°C bulb wall temperature is greater than the kindling temperatures of many materials. Lamp base temperatures should not exceed 350°C because, above that point, lead wires may deteriorate and the basing cement may loosen, causing premature lamp failure.

#### Distribution of Spectral Radiation

Halogen-cycle lamps offer great amounts of visible and infrared energy from a small light source, with about 90% of the energy in the infrared. Some GE lamps can be used for special applications where small amounts of ultraviolet energy are required.

# DESIGN FEATURES - MINIATURE LAMPS

## Consider These Factors When Selecting GE Miniature Lamps:

### Light Quantity and Quality

Where an object or surface is to be illuminated, the quantity of light required depends upon the size of the object, the brightness desired, the contrast with its background, and the time available for seeing.

Where light must be projected, either a separate reflector and lamp or a reflectorized lamp may be required. Consideration should be given to beam candlepower and beam spread.

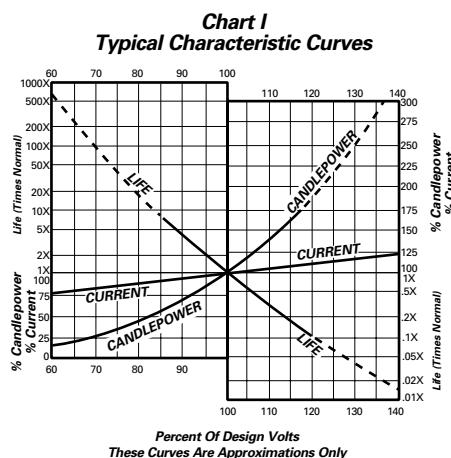
The spectral quality of color of light can be modified by external filters or coatings applied to the bulb.

### Light, Life, and Voltage

For any particular lamp, the light output and life depend upon the voltage at which a lamp is operated. For instance, as approximations, the light output varies as the 3.6 power of the voltage and the life varies inversely as the 12th power of the voltage. Chart I and Table I illustrate the effect of overvoltage or undervoltage applied to a lamp on its current, life, and light (candlepower) output. Indicated values (except for long-life lamps) are reasonably valid, between 95% and 110% rated volts. Beyond that, indicated characteristics may not be realized because of the increasing influence of factors which cannot be incorporated into the chart. The chart applies only to D.C. or sine-wave A.C. current, considering the applicable footnotes pertaining to published life. The data, particularly for lamp life, do not apply accurately for lamp operation on half-wave rectified voltage, semi-conductor dimming devices, and constant-current operation.

### Mechanical Strength

Low-voltage, high-current incandescent lamps are best suited for operation under conditions of shocks and vibration. Other factors affecting strength are the resonant frequency of lead wires and filament form. Where rough service conditions are encountered, screw base lamps should be avoided since they may loosen in their sockets. Higher voltage lamps of similar light output and life have longer, thinner filaments which are more prone to shock and vibration failures.



### Power Sources

In battery applications, the mean effective voltage delivered is generally higher than the average volts. The mean effective voltage, therefore, should be the design voltage of the lamp. Design voltages for flashlight lamps have been determined by extensive tests.

Filament lamp ratings are predicated on operation at a constant voltage. When operated from a higher-than-rated voltage in series with a dropping resistor, the effect is the same as operating at a constant current. Since the lamp resistance changes with operating life, the voltage drop across the lamp will increase; hence, the lamp life experienced will generally be about one half that resulting from constant-voltage operation.

When selecting a transformer or resistor, consideration should be given to lamp ampere tolerances and the regulation characteristics of the component.

Since integrated circuit applications are operated on D.C. and, in general, constant current, lamps used with them offer less life than applications where A.C. voltage and higher current can be tolerated. This is because the D.C. notching phenomenon occurs in greater percentage on low-current lamps, and the life is approximately 50% under constant current than that under controlled voltage. This half-life on constant current occurs because the filament is evaporating and becoming smaller as the lamp is operating, gradually increasing in resistance and requiring a rise in voltage to maintain a constant current value. This, in turn, increases the wattage and the filament temperature, causing an increase in the efficiency of the lamp.

### Space

Tolerances of bulb diameters, light center lengths, and overall lengths should be carefully considered by designers when specifying lamp housings. These tolerances and more-detailed drawings are available from your local GE Lamp Representative.

**Table I**

Underrated Bulb Voltages (100% <)				Overrated Bulb Voltages (100% >)			
Volts %	Amps %	MSCP %	Life %	Volts %	Amps %	MSCP %	Life %
99	99.4	96.5	112.8	101	100.5	103.5	88.7
98	98.9	93.2	127.4	102	101.1	107.2	78.8
97	98.3	89.9	144.1	103	101.6	110.9	70.1
96	97.8	86.7	163.2	104	102.2	114.7	62.5
95	97.2	83.6	185.1	105	102.7	118.6	55.7
90	94.4	69.2	354.1	110	105.4	139.6	31.9
85	91.4	56.6	703.0	115	108.0	163.1	18.7
80	88.5	45.8	1455.2	120	110.5	189.3	11.2
75	85.4	36.5	3156.9	125	113.1	218.4	6.9
70	82.2	28.7	7224.8	130	115.5	250.5	4.3

**NOTE: Calculations of characteristics shown in Chart I and Table I are approximate only between 95% and 110% of rated voltage for lamp types with 5,000 hours life or less. Certain lamp types will vary widely from calculated values. This chart will not apply to lamps with lives in excess of 5,000 hours or to halogen-cycle lamps. Consult your local GE Lamp Representative for application information.**

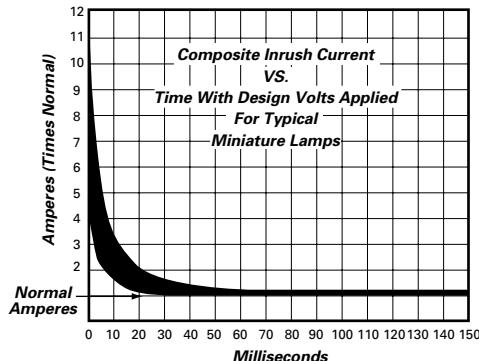
## Ambient Temperature

It is important to consider the lamp housing from the standpoints of radiation, absorption, and ventilation. Normal variations in ambient temperature do not affect the performance of miniature lamps. Above 175°C (350°F), the solder on conventional lamps may soften, deform, or melt, and the basing cement may loosen. All-glass wedge base lamps can be operated in lamp ambient temperatures of up to 230°C (450°F).

## Inrush Current

The initial current through a filament is called the inrush current. Cold resistance of a filament is generally considered to be that of room temperature, while the hot resistance depends upon the temperature of the filament (which varies with lamp size). Inrush current can be approximately 12 times as great as the normal operating current. This maximum value is seldom reached because the impedance in the circuit reduces it. However, equipment designers should take both inrush current and resistance into consideration when selecting a lamp. Chart II displays the general range of inrush current versus time after voltage is applied to a cold lamp. Inrush current can be reduced by applying a low value of pre-heat voltage.

Chart II



Tungsten filaments are more fragile at temperatures below the 250°C brittle-ductile region. This fragility can be reduced by using a keep-alive voltage or current in the off condition. A general recommendation for keep-alive requirements is 25% of the design voltage or current. This will reduce the inrush current from approximately 12 times to 4 times, depending upon the lamp type.

## Incandescence and Nigrescence

The rate of rise and decay time depends upon the mass of the filament to be heated. In general, the incandescence (rise time) to 90% brightness is about 100 to 300 milliseconds, and the nigrescence (decay time) is about 40 to 100 milliseconds. These values vary with each lamp type. The times are directly related to the lamp current; therefore, low-current lamps have the fastest response times.

## Flashing and Pulsing

Incandescent lamps have been used successfully in flashing and pulsing circuits. However, this may affect lamp life in some cases. For more information, contact your local GE Lamp Representative.

## Redundant System Philosophy

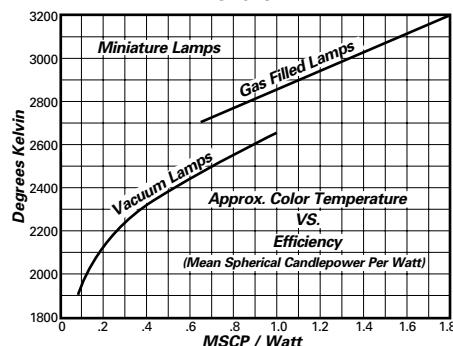
Two-filament lamps with filaments connected in parallel for additional reliability are not new. Experience has shown, however, that in many cases, the second filament has failed by the time it is needed. Thus, these lamps have never become very popular.

A more reliable system would be to use two or more lamps operating at the same time. Since they are physically separated from each other, it is easy to see when one has failed. This lamp can be replaced immediately, prior to the failure of the second lamp.

## Color Temperature

The radiation from tungsten filaments used in General Electric lamps is similar to that from a "black body" at specific temperatures. This can be determined approximately from Chart III. Use the published lamp ratings (or estimated derated values) in this catalog. The catalog indicates whether a lamp is vacuum or gas-filled.

Chart III



## Lamp Life

Rated average life is that obtained in closely controlled laboratory testing of lamps on 60 Hertz Alternating Current at their design voltage. Certain lamps are tested with Direct Current and are footnoted accordingly. Very long life lamps are generally rated on the basis of extrapolated laboratory test data. Service conditions such as shocks, vibration, voltage fluctuations, temperature, etc., may contribute to a shorter average service life.

Ordinarily, for still-rack operation, normal tungsten filament evaporation is the basic force or mechanism controlling incandescent lamp life. Where normal filament evaporation is the dominant failure mechanism, lamps should reach their design-predicted lifetimes.

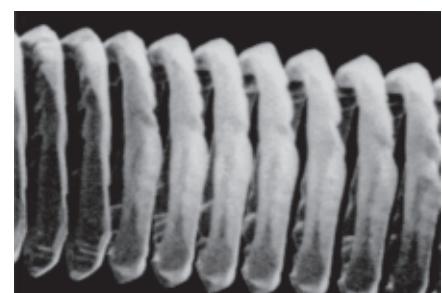
Another filament mechanism has been identified which may reduce life to one-half or much less of its design-predicted value. It is commonly referred to as "filament notching." Notching is the appearance of step-like or sawtooth irregularities, appearing on all or part of the tungsten filament surface, after extensive (e.g. 3000Hrs) burning.

These notches reduce the filament wire diameter at various points. In some cases, especially in fine-wire diameter lamps, the notching is so severe as to almost penetrate the entire wire diameter. Thus accelerated spot evaporation due to this notching (as well as reduced filament strength) now becomes the dominant mechanism for influencing lamp life. Because of its abnormal evaporation and/or reduced strength effects, lamp lifetimes due to notching are substantially lessened.

Notching has been due to at least three factors:

1. Low-temperature filament operation, less than that for significant normal tungsten evaporation.
2. Small filament-wire sizes, less than one mil (.001") diameter in many cases, typical of low- amperage lamps.
3. Increased use of D.C. voltage operation

Subminiature lamps, those with bulb sizes of T2 and below, have been the most susceptible candidates for filament notching. Since notching is very difficult to predict, it is recommended that lamps susceptible to this phenomenon be easily replaceable in their applications.



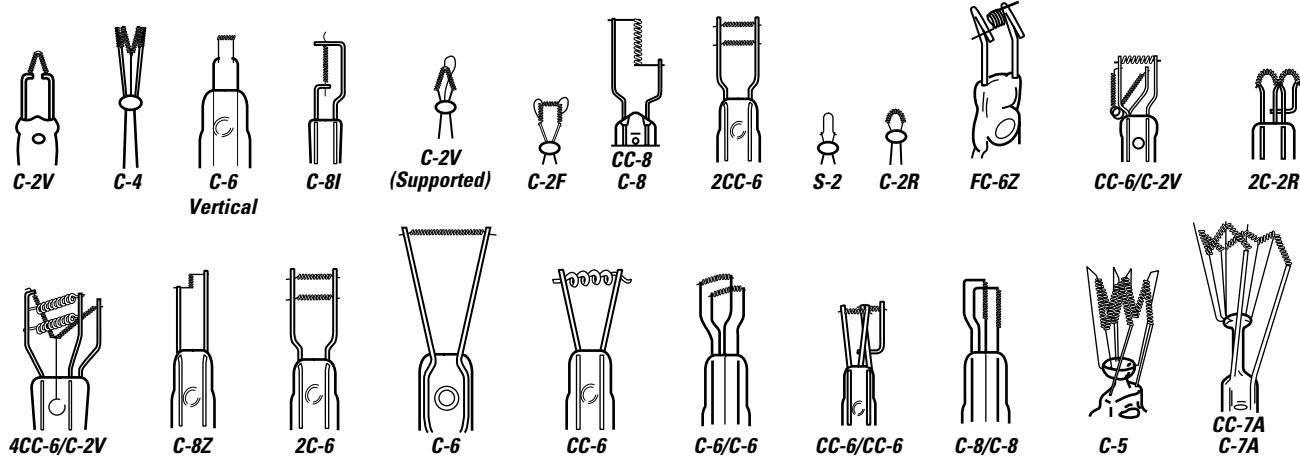
An example of filament notching.

# MINIATURE FILAMENTS AND BASES

## Filaments

Filaments for miniature and subminiature lamps may be a straight wire (S), a coil (C), or a coiled coil (CC). Coiling the filament wire effectively shortens the filament length so that smaller bulbs can be used. In addition, in gas-filled lamps, coiling the wire reduces thermal losses and increases efficiency.

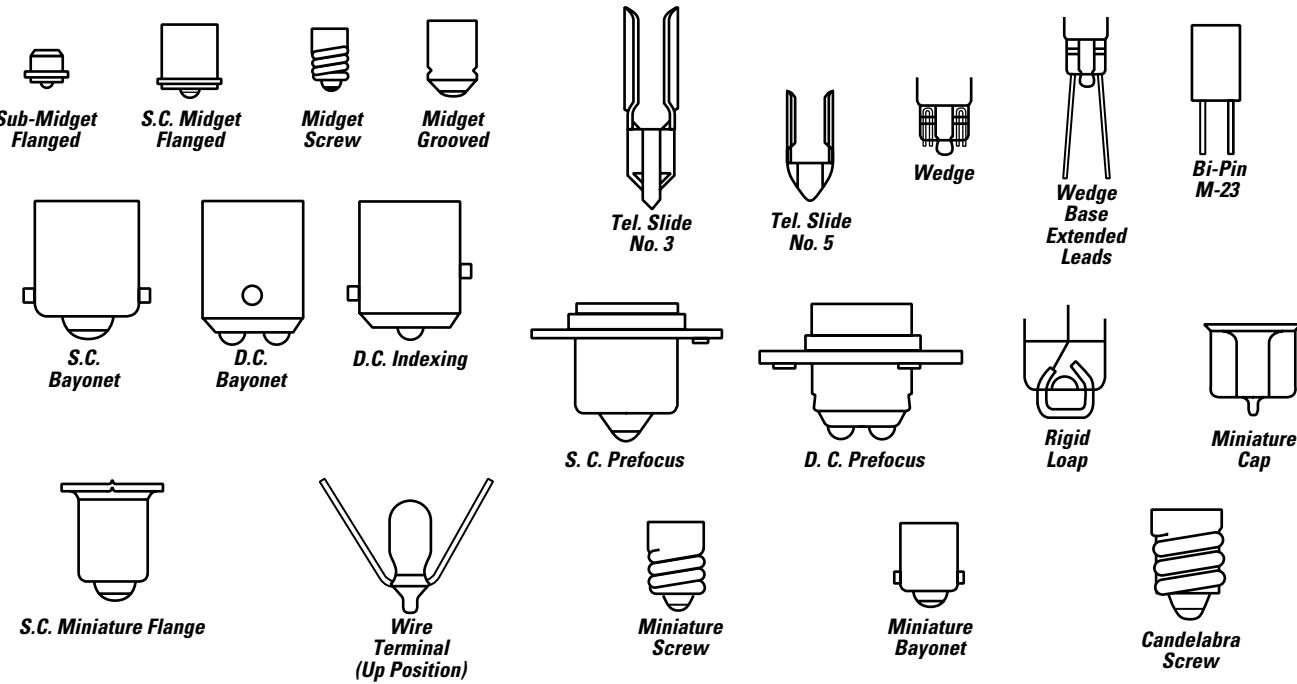
Tungsten is almost universally used as lamp filament material because of its high melting point at incandescence. The number following the coil identification letter(s) denotes the arrangement of the filament on the supports.



## Bases

Bases provide electrical contact to the lamp and, in most cases, also support the lamp in the fixture. For miniature and subminiature lamps, bayonet or wedge base types are generally preferred over screw types

when vibration is present. In addition, wedge bases reduce socket size and complexity. Flanged or collared types are usually associated with requirements for filament location.

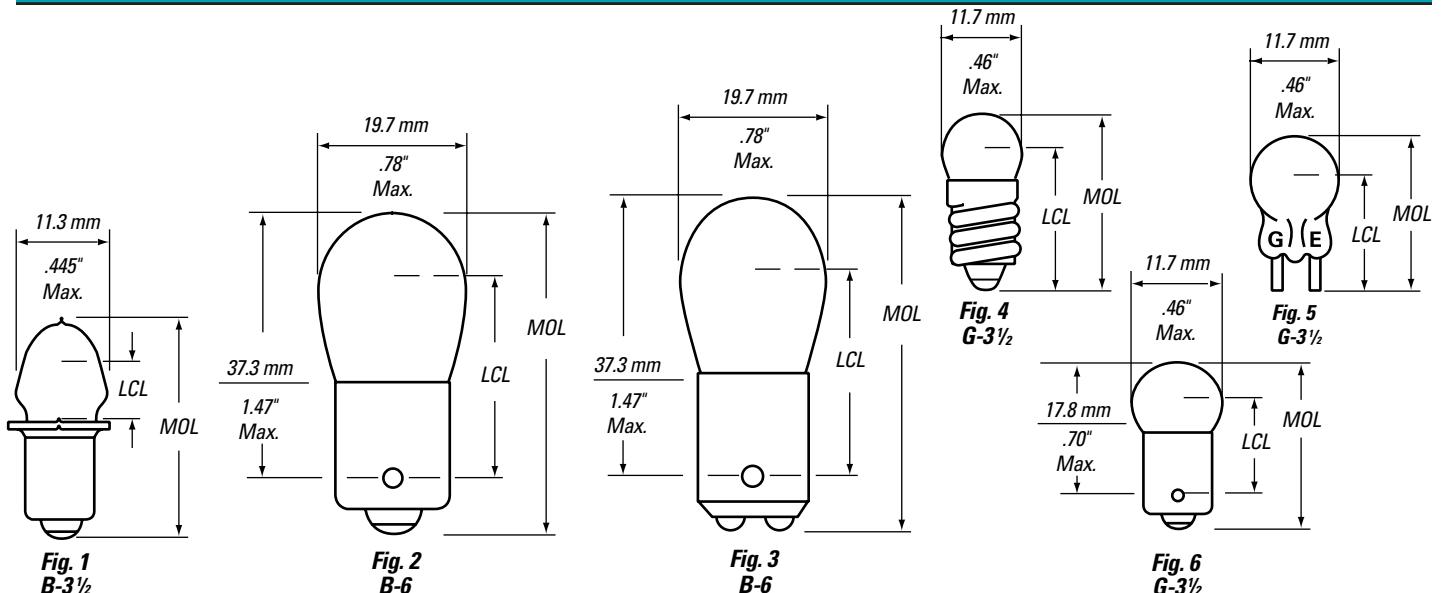


## S.C. and D.C. Prefocused Base Lamps

The letter "A" following the base type designates that the distance from the bottom of the collar to the bottom of the base contact is  $\frac{13}{32}$ ". For "B" bases this distance is  $\frac{9}{16}$ ". The few lamps identified by the letter "S"

in the "Base" column are special in that the collar location and/or the orientation of the contacts differs from the above.

## MINIATURE LAMP SPECIFICATION



**Fig. 1**  
**B-3½**

**Fig. 2**  
**B-6**

**Fig. 3**  
**B-6**

**Fig. 4**  
**G-3½**

**Fig. 5**  
**G-3½**

**Fig. 6**  
**G-3½**

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac. C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
	Blister Pack	Unit Pack	Bulk Pack													
<b>B-3½ BULB 7/16" (11mm) DIAMETER</b>																
1	23151			<b>KPR104</b>	Flashlight - 2D Krypton		2.2	.47A	.47	S.C. Miniature Flanged	C	C-2R	.25	1.25	15 (116)	1
2	12677			<b>PR4</b>	Flashlight - 2C Cells		2.33	.27A	.4	S.C. Miniature Flanged	B	C-2R	.25	1.25	10 (116)	1
3	12675	25181		<b>PR2</b>	Flashlight - 2D Cells		2.38	.50A	.8	S.C. Miniature Flanged	B	C-2R	.25	1.25	15 (116)	1
4	22961			<b>KPR102</b>	Flashlight - 2D Krypton		2.4	.70A	1.3	S.C. Miniature Flanged	C	C-2R	.25	1.25	15 (116)	1
5		25222		<b>PR6</b>	Flashlight - 2D Industrial Cells		2.47	.30A	.45	S.C. Miniature Flanged	B	C-2R	.25	1.25	30 (116)	1
6	12676	25193		<b>PR3</b>	Flashlight - 3D Cells		3.57	.50A	1.5	S.C. Miniature Flanged	B	C-2R	.25	1.25	15 (116)	1
7		25235		<b>PR7</b>	Flashlight - 3D Industrial Cells		3.70	.30A	.9	S.C. Miniature Flanged	B	C-2R	.25	1.25	30 (116)	1
8	12681	25262		<b>PR13</b>	Hand Lantern - 4F Cells		4.75	.50A	2.2	S.C. Miniature Flanged	C	C-2R	.25	1.25	15 (116)	1
9	23153			<b>KPR113</b>	Flashlight - 4D Krypton		4.8	.75A	4.1	S.C. Miniature Flanged	C	C-2R	.25	1.25	20 (116)	1
10	12680	25252		<b>PR12</b>	Flashlight - 5D Cells		5.95	.50A	3.1	S.C. Miniature Flanged	C	C-2R	.25	1.25	15 (116)	1
11	23154			<b>KPR118</b>	Flashlight - 6D Krypton		7.2	.55A	5.2	S.C. Miniature Flanged	C	C-2R	.25	1.25	15 (116)	1
12		25289		<b>PR18</b>	Flashlight - 6D Cells (14)		7.20	.55A	5.5	S.C. Miniature Flanged	C	C-2R	.25	1.25	3 (116)	1
<b>B-6 BULB 3/4" (19mm) DIAMETER</b>																
13		34265		<b>1317</b>	Aircraft Emergency Lighting		6.00	.51A	3.4	S.C. Bayonet	C	C-6	1.12	1.75	100 (116)	2
14		25988		<b>210</b>	Instrument		6.5	1.78A	15	D.C. Bayonet	C	C-6	1.06	1.75	100	3
15	12367	26709		<b>1003</b>	Auto Interior		12.8	.94A	15	S.C. Bayonet	C	C-6	1.06	1.75	200	2
16	47800			<b>1003KR*</b>	Auto Interior - Krypton Fill. Long Life		12.8	.94A	15	S.C. Bayonet	C	C-6	1.06	1.75	400	2
17	12373	26726	26728	<b>1004</b>	Auto Interior and Marine		12.8	.94A	15	D.C. Bayonet	C	C-6	1.06	1.75	200	3
18		36147		<b>105</b>	Auto Interior - Heavy Duty		12.8	1.00A	12	S.C. Bayonet	C	C-6	1.06	1.75	500	2
19		27118		<b>1309</b>	Aircraft Interior. Reading, Dome, Map Light		28.0	.52A	15	S.C. Bayonet	C	2C-2R	1.06	1.75	300	2
20		12824		<b>1308</b>	Aircraft Reading Light Spiral Leads. Krypton.		28.0	.56A	16	S.C. Bayonet	C	CC-8	1.06	1.75	2,000	2
<b>G-3½ BULB 7/16" (11mm) DIAMETER</b>																
21		25354		<b>14</b>	Flashlight - 2D Cells		2.47	.30A	.5	Miniature Screw	B	C-2R	.72	.94	15 (116)	4
22		25312		<b>10</b>	Indicator (69)		2.50	.50A	.5	Miniature Two Pin	B	C-6	.62	.94	3,000	5
23		25331		<b>13</b>	Flashlight - 3D Cells		3.70	.30A	.98	Miniature Screw	B	C-2R	.72	.94	15 (116)	4
24		25319		<b>12</b>	Radio (69)		6.30	.15A	.35	Miniature Two Pin	B	C-6	.62	.94	5,000 (44)	5
25		25529		<b>51</b>	Indicator		7.50	.22A	1	Miniature Bayonet	B	C-2R	.50	.94	1,000	6
26		27252		<b>1449</b>	Toy Train		14.0	.20A	2	Miniature Screw	B	C-2V (13)	.72	.94	250	4
27		25377	25379	<b>19</b>	Toy Train (69)		14.40	.10A	.9	Miniature Two Pin	B	C-6	.62	.94	1,000	5

13. Supported.

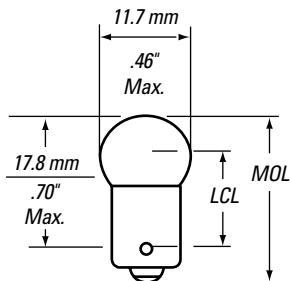
14. This lamp is specially designed for a particular purchaser and may not be suitable for other uses because of its excessive wattage requirements for the bulb size.

44. At 6.6 volts.

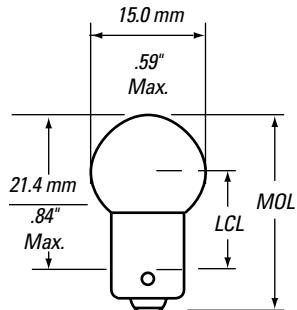
69. Not recommended for new OEM applications - suggested for new design are wedge base lamps such as GE Lamp Numbers 259, and 161.

116. Life tests are performed on DC voltage only.

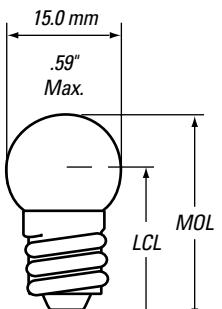
# MINIATURE LAMP SPECIFICATION



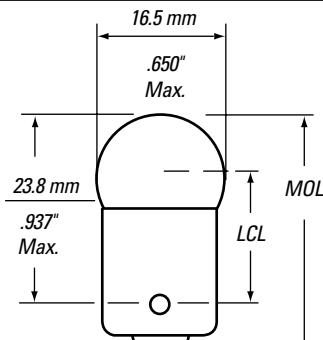
**Fig. 6  
G-3½**



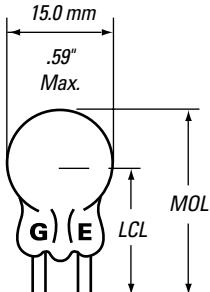
**Fig. 8  
G-4½**



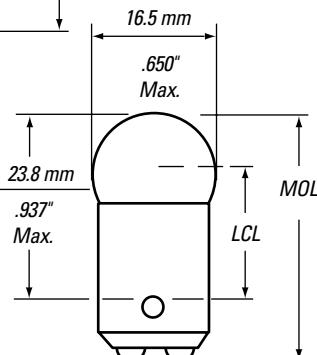
**Fig. 7  
G-4½**



**Fig. 10  
G-5**



**Fig. 9  
G-4½**



**Fig. 11  
G-5**

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
	Blister Pack	Unit Pack	Bulk Pack													
<b>G-3½ BULB <math>\frac{7}{16}</math>" (11mm) DIAMETER (continued)</b>																
1	25550	25552	53		Auto and Indicator		14.4	.12A	1	Miniature Bayonet	B	C-2V <sup>(13)</sup>	.50	.94	1,000	6
2	12329	27207	27209	1445	Auto		14.4	.135A	.7	Miniature Bayonet	B	C-2V <sup>(13)</sup>	.50	.94	2,000	6
3		27263		1450	Toy Train Ratings		18.0	.15A	1.5						250	
4		44719		265	Indicator		24.0	.035A	.23	Miniature Bayonet	B	C-2F	.50	.94	3,000	6
5		26255		356	Aircraft <sup>(14)</sup>		28.0	.08A	.75	Miniature Bayonet	B	C-2F	.50	.94	5,000	6
							28.0	.17A	3.5	Miniature Bayonet	B	C-2F	.50	.94	500	6
<b>G-4½ BULB <math>\frac{9}{16}</math>" (14mm) DIAMETER</b>																
6	25388		27		Hand Lantern – 4F Cells		4.9	.30A	1.4	Miniature Screw	B	C-2R	.72	1.07	30 <sup>(116)</sup>	7
7	26354		425		Hand Lantern – 4F Cells		5.0	.50A	2.3	Miniature Screw	C	C-2R	.72	1.07	15 <sup>(116)</sup>	7
8	26460		502		Hand Lantern – 4F Cells		5.1	.15A	.6	Miniature Screw	B	C-2R	.72	1.07	100 <sup>(116)</sup>	7
9	26549		605		Flashlight – 5D Cells		6.15	.50A	3.4	Miniature Screw	C	C-2R	.72	1.07	15 <sup>(116)</sup>	7
10	25371		15		Indicator <sup>(69)</sup>		7.0	.40A	2	Miniature Two Pin	C	C-6	.69	1.07	500	9
11	25576		55		Instrument		7.0	.41A	2	Miniature Bayonet	C	C-2R	.56	1.07	500	8
12	23218	25591	25593	57	Auto and Instrument		14.0	.24A	2	Miniature Bayonet	B	C-2V <sup>(13)</sup>	.56	1.07	500	8
13	26095		258		Toy Train, Flasher Lamp <sup>(70)</sup>		14.0	.27A	1.6	Miniature Screw	C	C-2R	.81	1.07	500 <sup>(3)</sup>	7
14	12330	27945	27948	1895	Auto, Truck Marker		14.0	.27A	2	Miniature Bayonet	B	C-2F	.56	1.07	2,000	8
15		32688		293	Auto and Radio		14.0	.33A	2	Miniature Bayonet	B	C-2F	.56	1.07	7,500	8
16		26441		456	Instrument		28.0	.17A	2	Miniature Bayonet	B	C-2F	.56	1.07	5,000	8
<b>G-5 BULB <math>\frac{5}{8}</math>" (16mm) DIAMETER</b>																
17		32098		1315	Aircraft Emergency Lighting		2.5	1.00A	1.75	S.C. Bayonet	C	C-6	.69	1.25	20 <sup>(116)</sup>	10
18		26112		301	Aircraft		28.0	.17A	3	S.C. Bayonet	B	C-2F	.69	1.25	500	10
19		26120		302	Aircraft		28.0	.17A	3	D.C. Bayonet	B	C-2F	.69	1.25	500	11

3. Useful hours.

13. Supported.

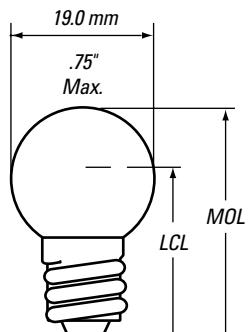
14. This lamp is specially designed for a particular purchaser and may not be suitable for other uses because of its excessive wattage requirements for the bulb size.

69. Not recommended for new OEM applications - suggested for new design are wedge base lamps such as GE Lamp Numbers 259, and 161.

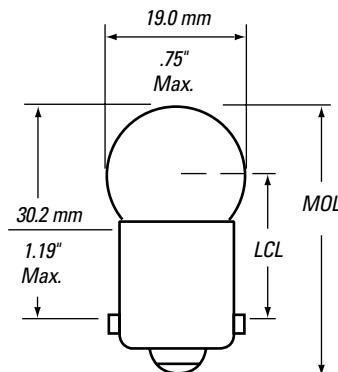
70. These lamps produce a random flashing indication only. While the majority should flash between 40-160 flashes per minute at normal room temperature, some will be outside this range. As ambient temperature and/or input voltage changes, the flash rate may vary considerably. At rated voltage and room temperature most lamps will flash within 60 seconds.

116. Life tests are performed on DC voltage only.

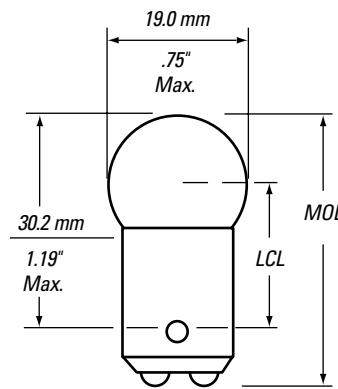
## MINIATURE LAMP SPECIFICATION



**Fig. 12**  
**G-6**



**Fig. 13**  
**G-6**



**Fig. 14**  
**G-6**

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
	Blister Pack	Unit Pack	Bulk Pack													
<b>G-6 BULB 3/4" (19mm) DIAMETER</b>																
1	25927		157	Medical			5.8	1.10A	8.1	Miniature Screw	C	C-2R	1.0 <sup>(127)</sup>	1.22	50	12
2	25736		81	Auto, Aircraft, and Coin Machine			6.5	1.02A	6	S.C. Bayonet	C	C-2R	.75	1.44	500	13
3	25751		82	Auto and Marine			6.5	1.02A	6	D.C. Bayonet	C	C-2R	.75	1.44	500	14
4	12321		63	Coin Machine			7.0	.63A	3	S.C. Bayonet	C	C-2R	.75	1.44	1,000	13
5	25643		64	Aircraft and Marine			7.0	.63A	3	D.C. Bayonet	C	C-2R	.75	1.44	1,000	14
6	12363	25778	18618	89	Auto		13.0	.58A	6	S.C. Bayonet	C	C-2R	.75	1.44	750	13
7	47797		89KR*	Auto. Krypton Fill. Long Life			13.0	.58A	6	S.C. Bayonet	C	C-2R	.75	1.44	1,500	13
8	12364	25794	25796	90	Auto and Marine		13.0	.58A	6	D.C. Bayonet	C	C-2R	.75	1.44	750	14
9	16287	16286	98	Auto, Heavy Duty			13.0	.62A	6	S.C. Bayonet	C	C-2V	.75	1.44	800	13
10	12324	25652	25654	67	Auto		13.5	.59A	4	S.C. Bayonet	C	C-2R	.81	1.44	5,000 <sup>(4)</sup>	13
11	25692		68	Auto and Marine			13.5	.59A	4	D.C. Bayonet	C	C-2R	.81	1.44	5,000 <sup>(4)</sup>	14
12	26955		1155	Auto, Truck Marker – Heavy Duty			13.5	.59A	4	S.C. Bayonet	C	2C-2R	.81	1.44	5,000 <sup>(4)</sup>	13
13	12322	25836	25838	97	Auto – Heavy Duty		13.5	.69A	4	S.C. Bayonet	C	C-2V <sup>(13)</sup>	.81	1.44	5,000 <sup>(4)</sup>	13
14	23322		35417	R10W LL	Auto. ECE R10W GE 2641 – Long Life		13.5	10W	10.0	S.C. Bayonet	C	C-2R	.75	1.47	400	13
15	23314		30859	R5W LL	Auto. ECE R5W GE 2619 – Long Life		13.5	5W	4.0	S.C. Bayonet	B	C-2R	.75	1.47	500	13
16	23023	26570		631	Auto – Two filaments in series – Heavy Duty		14.0	.63A	6	S.C. Bayonet	C	2C-2R	.75	1.44	1,000	13
17	26485		509K	Indicator		303	24.0	.18A	2.8	Candelabra Screw	B	C-2R	.75	1.47	1,000	–
18	27092		1251	Instrument – Two identical supported filaments in series			28.0	.23A	3	S.C. Bayonet	B	2C-2V <sup>(13)</sup>	.75	1.44	2,000	13
19	27097		1252	Instrument – Two identical supported filaments in series			28.0	.23A	3	D.C. Bayonet	B	2C-2V <sup>(13)</sup>	.75	1.44	2,000	14
20	26127		303	Aircraft			28.0	.30A	6	S.C. Bayonet	B	C-2F	.75	1.44	500	13
21	26136		304	Aircraft			28.0	.30A	6	D.C. Bayonet	B	C-2F	.75	1.44	500	14
22	26561	26563	623	Instrument – Two supported filaments in series			28.0	.37A	6	S.C. Bayonet	B	2C-2V <sup>(13)</sup>	.75	1.44	1,000	13
23	26567	26568	624	Marine – Two supported filaments in series			28.0	.37A	6	D.C. Bayonet	B	2C-2V <sup>(13)</sup>	.75	1.44	1,000	14
24	27044		1224	Marine			34.0 <sup>(147)</sup>	.16A	3.8	D.C. Bayonet	B	C-2F	.69	1.44	500	14

4. At 14 volts.

13. Supported.

127. LCL measured to top of filament.

147. Differs from ANSI.

303. See page 50.

## MINIATURE LAMP SPECIFICATION

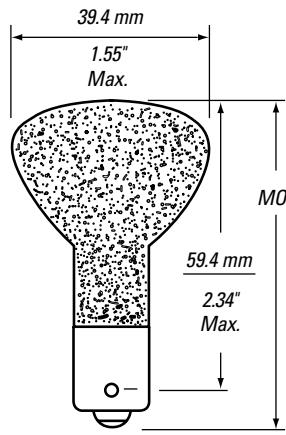


Fig. 17  
R-12

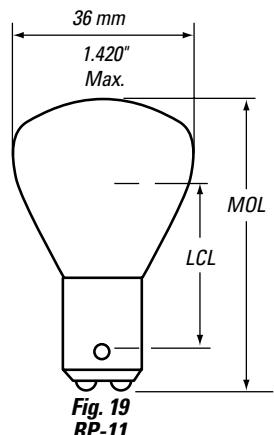


Fig. 19  
RP-11

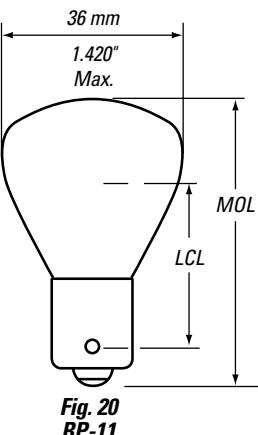


Fig. 20  
RP-11

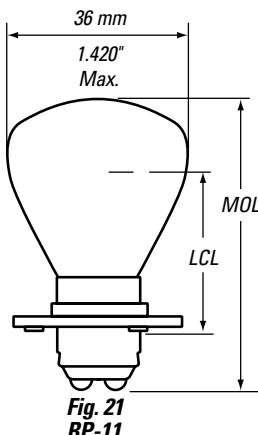


Fig. 21  
RP-11

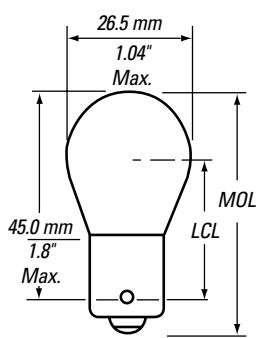


Fig. 24  
S-8

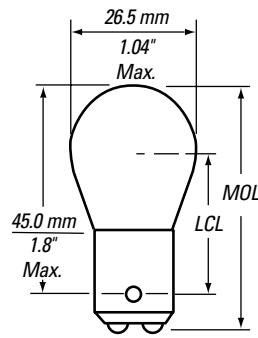


Fig. 25  
S-8

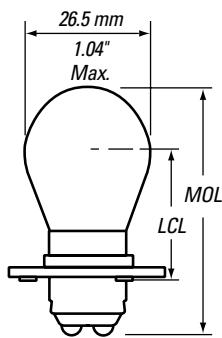


Fig. 27  
S-8

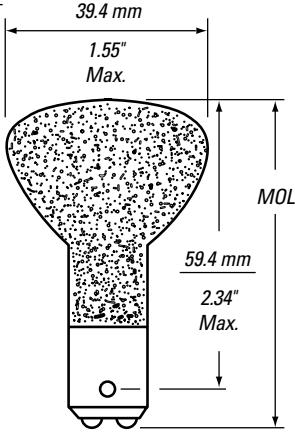


Fig. 112  
R-12

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
<b>R-12 BULB 1½" (38mm) DIAMETER</b>																
1	27150		1383		Auto, Reading Light – Base half of bulb reflectorized		13.0	20W	–	S.C. Bayonet	C	C-8	–	2.63	300	17
2	27159		1388		Special Telephone Trouble – Base half of bulb reflectorized.		24.0	20W	–	D.C. Bayonet	C	CC-8	–	2.63	500	112
3	27154		1385		Special Reading Light – Base half of bulb reflectorized		28.0	20W	–	S.C. Bayonet	C	CC-8	–	2.63	300	17

<b>RP-11 BULB 1¾" (35mm) DIAMETER Burning position – base down to horizontal.</b>																
4	28100		2331		Instrument	305	5.9	4.66A	32	D.C. Pf. (S)	C	C-6	1.18	2.25	400	21
5	26885		1133		Instrument	305	6.2	4.49A	32	S.C. Bayonet	C	C-2R	1.25	2.25	200	20
6	27021	27023	1195		Auto – Nickel-plated base	305	12.5	3.00A	50	S.C. Bayonet	C	C-2R	1.25	2.25	300	20
7	27026		1196		Auto	305	12.5	3.00A	50	D.C. Bayonet	C	C-2R	1.25	2.25	300	19
8	32147		1062		Special Service, Emer, Ltg	305	40.0	.92A	50	D.C. Bayonet	C	C-5	1.25	2.25	100	19

<b>S-8 BULB 1" (25mm) DIAMETER</b>															
9	27461		1612		Instrument (LCL & Actual Alignment tolerance + <sup>3/64"</sup> )	5.4	1.90A <sup>(147)</sup>	10	D.C. Bayonet	C	C-6	1.25	2.0	1,000	25
10	27548		1680		Aircraft	6.0	4.10A	32	S.C. Bayonet	C	C-6	1.25	2.0	300	24
11	33995		1680X		Aircraft – Solid Silver Contact	6.0	4.10A	32	S.C. Bayonet	C	C-6	1.25	2.0	300	24
12	37169		1096		Instrument, Microscope Illuminator	6.0	4.50A	30	D.C. Pf. (S)	C	C-2R	1.00	2.0	500	27
13	27305		1468		Medical Instrument – Burning position base up to horiz.	6.0	4.50A	30	D.C. Pf. (S)	C	C-2R	1.25	2.0	500	27
14	42677		1468X		Medical Instrument – Burning position base up to horiz.	6.0	4.50A	30	D.C. Pf. (S)	C	C-2R	1.25	2.0	500	27
15	27439		1594		Instrument, Microscope base down to horiz.	6.0	5.00A	36	D.C. Bayonet	C	C-6	1.25	2.0	250	25

147. Differs from ANSI.

305. See page 50.

## MINIATURE LAMP SPECIFICATION

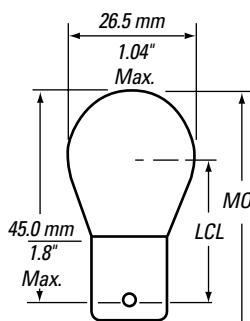


Fig. 24  
S-8

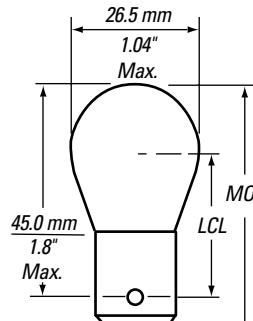


Fig. 25  
S-8

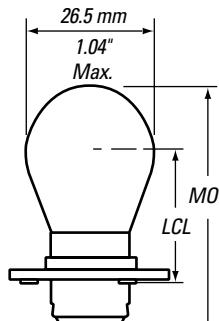


Fig. 27  
S-8

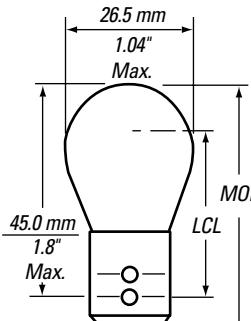


Fig. 28  
S-8

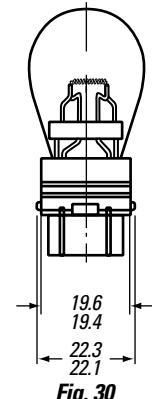


Fig. 30

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
<b>S-8 BULB 1" (25mm) DIAMETER (continued)</b>																
1	26872		1129		Special Service		6.4	2.63A	21	S.C. Bayonet	C	C-6	1.25	2.0	200	24
2	12297		1154		Auto Stop, Tail, Signal		6.4	2.63A	21	D.C. Index	C	C-6	1.25	2	200	28
3			1460		Medical		7.0	.75A	3						1,000	
4	37342	37343	1460X		Microscope Illuminator – Silver contacts		6.5	2.75A	23	D.C. Pf. (A)	C	C-6 <sup>(11)</sup>	1.25	2.0	100	27
5	27382		1493		Instrument, Microscope (L.C.L. & AA tolerance $\frac{3}{64}$ "")		6.5	2.75A	23	D.C. Bayonet	C	C-6 <sup>(11)</sup>	1.12	2.0	100	25
6	27488	27489	1630		Instrument, Microscope		6.5	2.75A	23	D.C. Pf. (A)	C	C-6 <sup>(11)</sup>	1.00	2.0	100	27
7	27491		1631X		Instrument, Colorimeter – Illuminator Silver contacts		6.5	2.75A	23	D.C. Pf. (A)	C	C-6 <sup>(11)</sup>	1.00	2.0	100	27
8	27472		1619		Instrument		6.7	1.90A	15	S.C. Bayonet	C	C-6	1.12	2.0	500	24
9	25772		88		Indicator		6.8	1.91A	15	D.C. Bayonet	C	C-6	1.12	2.0	300	25
10	41755	22523	1295NA		Auto Signal		12.5	3.00A	37	S.C. Bayonet	C	C-2R	1.25	2.0	200	24
11	23217	25811	25813	93	Auto		12.8	1.04A	15	S.C. Bayonet	C	C-6 <sup>(147)</sup>	1.12	2.0	700	24
12		25829	25831	94	Auto and Marine		12.8	1.04A	15	D.C. Bayonet	C	C-6 <sup>(147)</sup>	1.12	2.0	700	25
13	26945		1152		Special Service		12.8	1.34A	21	D.C. Bayonet	C	C-2R	1.25	2	500	25
14	27004		1176		Auto Stop, Tail, Signal		12.8	1.34A	21	D.C. Bayonet	C	C-6	1.25	2.0	300	25
							14.0	.59A	6						1,500	
15	12346	26903	26905	1141	Auto		12.8	1.44A	21	S.C. Bayonet	C	C-6	1.25	2.0	1,000	24
16	47802		1141KR*		Auto. Krypton Fill. Long Life		12.8	1.44A	21	S.C. Bayonet	C	C-6	1.25	2.0	2,000	24
17	26917	26919	1142		Auto		12.8	1.44A	21	D.C. Bayonet	C	C-6	1.25	2.0	1,000	25
18	27630		1777		Aircraft Tail Light		12.8	1.52A	26	S.C. Bayonet	C	C-2R	1.12	2.0	400	24
19	23028		3155		Auto Signal		12.8	1.60A	21	Plastic Wedge	C	C-6	1.10	2.09	1,500	30
20	26775		1034		Auto Stop Tail Signal		12.8	1.80A	32	D.C. Index	C	C-6	1.25	2	200	28
							14.0	.59A	3						5,000	
21	40134	26838		1073	Auto Signal		12.8	1.80A	32	S.C. Bayonet	C	C-6	1.25	2.0	200	24
22		26854		1076	Auto		12.8	1.80A	32	D.C. Bayonet	C	C-6	1.25	2.0	200	25
23	12344	26960	26962	1156	Auto Stop		12.8	2.10A	32	S.C. Bayonet	C	C-6	1.25	2.0	1,200	24
24	23334		11666	1156KR	Auto Stop. Krypton Fill. Long Life		12.8	2.10A	32	S.C. Bayonet	C	C-6	1.25	2.0	2,400	24
							14.0	.59A	3						5,000	
25	21028	20248		1156NA	Auto Stop. Natural Amber		12.8	2.10A	24	S.C. Bayonet	C	C-6	1.25	2.0	1,200	24
26	12294	26969	26971	1157	Auto Stop, Signal		12.8	2.10A	32	D.C. Index	C	C-6	1.25	2.0	1,200	28
							14.0	.59A	3						5,000	
27	23337			1157KR	Auto Stop, Signal. Krypton Fill. Long Life		12.8	2.10A	32	D.C. Index	C	C-6	1.25	2.0	2,400	28
							14.0	.59A	3						10,000	
28	12310	26975	26976	1157NA	Auto Stop, Signal – Natural Amber		12.8	2.10A	24	D.C. Index	C	C-6	1.25	2.0	1,200	28
							14.0	.59A	2.2						5,000	
29	47798			1157NAKR*	Auto Stop, Signal – Natural Amber. Krypton Fill. Long Life		12.8	2.10A	24	D.C. Index	C	C-6	1.25	2.0	2,400	28
							14.0	.59A	2.2						10,000	

11. Vertical

147. Differs from ANSI.

# MINIATURE LAMP SPECIFICATION

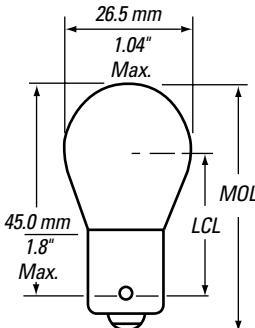


Fig. 24  
S-8

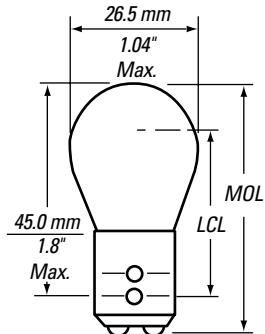


Fig. 28  
S-8

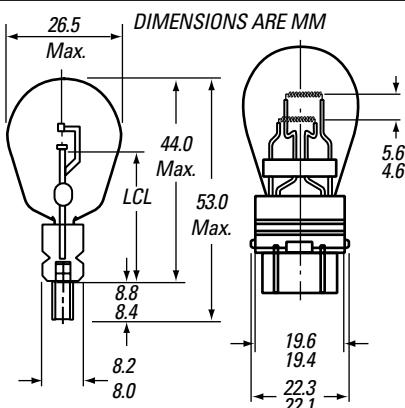


Fig. 29  
S-8

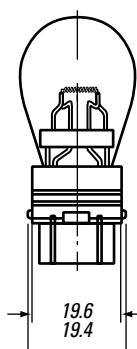


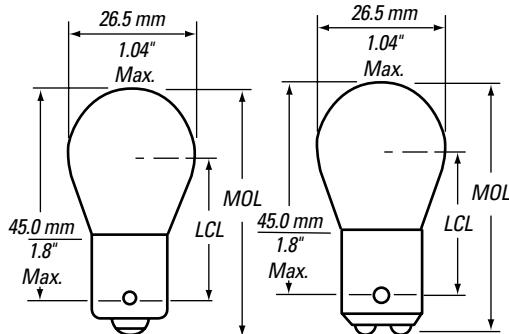
Fig. 30

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
	Blister Pack	Unit Pack	Bulk Pack													
<b>S-8 BULB 1" (25mm) DIAMETER (continued)</b>																
1	12296	44760	18620	<b>2057</b>	Auto Stop, Signal		12.8	2.10A	32	D.C. Index	C	C-6	1.25	2.0	1,200	28
2	23339		10018	<b>2057KR</b>	Auto Stop, Signal. Krypton Fill. Long Life		12.8	2.10A	32	D.C. Index	C	C-6	1.25	2.0	2,400	28
3	12312	44763	44764	<b>2057NA</b>	Auto Stop, Signal – Natural Amber		12.8	2.10A	24	D.C. Index	C	C-6	1.25	2.0	1,200	28
4	47799			<b>2057NAKR*</b>	Auto Stop, Signal – Natural Amber. Krypton Fill. Long Life		12.8	2.10A	24	D.C. Index	C	C-6	1.25	2.0	2,400	28
5			12899	<b>2058U</b>	Auto/Truck Stop, Signal		12.8	2.10A	32	Wire Terminals <sup>(113)</sup>	C	C-6	–	1.81	1,200	–
							14.0	.48A	2			C-6		5,000		
6			28085	<b>2144</b>	Auto/Truck		12.8	2.10A	32	Wire Terminals <sup>(113)</sup>	C	C-6	–	1.75	1,200	–
7	12305	18389		<b>3057</b>	Auto Stop, Signal		12.8	2.10A	32	Plastic Wedge	C	C-6	1.10	2.09	1,200	29
							14.0	.48A	2			C-6		5,000		
8	26378			<b>3057KR</b>	Auto Stop, Signal. Krypton Fill. Long Life		12.8	2.10A	32	Plastic Wedge	C	C-6	1.1	2.09	2,000	29
							14.0	.48A	2			C-6		10,000		
9	12313	18391		<b>3057NA</b>	Auto Stop, Signal – Natural Amber		12.8	2.10A	24	Plastic Wedge	C	C-6	1.10	2.09	1,200	29
							14.0	.48A	1.5			C-6		5,000		
10	12351	21863		<b>3156</b>	Auto Stop		12.8	2.10A	32	Plastic Wedge	C	C-6	1.10	2.09	1,200	30
11	27565			<b>3156KR*</b>	Auto Stop. Krypton Fill. Long Life		12.8	2.10A	32	Plastic Wedge	C	C-6	1.10	2.09	2,000	30
12	12306	17172		<b>3157</b>	Auto Stop, Signal		12.8	2.10A	32	Plastic Wedge	C	C-6	1.10	2.09	1,200	29
							14.0	.59A	3			C-6		5,000		
13	26377			<b>3157KR</b>	Auto Stop, Signal. Krypton Fill. Long Life		12.8	2.10A	32	Plastic Wedge	C	C-6	1.10	2.09	2,000	29
							14.0	.59A	3			C-6		10,000		
14	12314	17173		<b>3157NA</b>	Auto Stop, Signal – Natural Amber		12.8	2.10A	24	Plastic Wedge	C	C-6	1.10	2.09	1,200	29
							14.0	.59A	2.2			C-6		5,000		
15	26380			<b>3157NAKR</b>	Auto Stop, Signal – Natural Amber. Krypton Fill. Long Life		12.8	2.10A	24	Plastic Wedge	C	C-6	1.10	2.09	2,000	29
							14.0	.59A	2.2			C-6		10,000		
16	12298	16291	16290	<b>2357</b>	Auto Stop, Signal		12.8	2.20A	40	D.C. Index	C	C-6	1.25	2.0	400	28
							14.0	.59A	3			C-6		5,000		
17	12299	15698	15699	<b>2357NA</b>	Auto/Truck Stop/Signal, Natural Amber		12.8	2.20A	30	D.C. Index	C	C-6	1.25	2.0	400	28
							14.0	.59A	2.2			C-6		5,000		
18	18047			<b>2396</b>	Auto Stop		12.8	2.23A	40	S.C. Bayonet	C	C-6	1.25	2.0	400	24
19	27560			<b>2397*</b>	Auto Stop, Signal		12.8	2.23A	40	D.C. Index	C	C-6	1.25	2.0	400	28
							14.0	.48A	2			C-6		5,000		

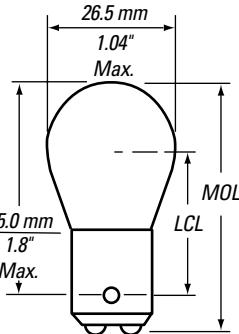
113. This is a flange seal wire terminal lamp. When unbased lamps such as these are handled and wired into a device, damage can be kept to a minimum by allowing sufficient clearance so that no physical strain or excessive heat is placed on the exhaust tube, exhaust tube tip, or glass

seal; by taking care in mounting lamp in equipment so that any material touching the glass is compatible in thermal expansion; and by avoiding excessive tensile strain on the lead wires.

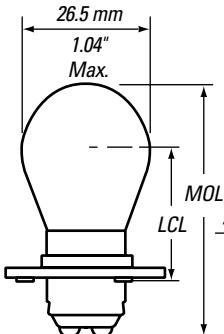
## MINIATURE LAMP SPECIFICATION



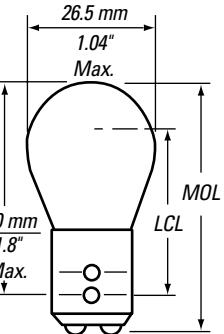
**Fig. 24  
S-8**



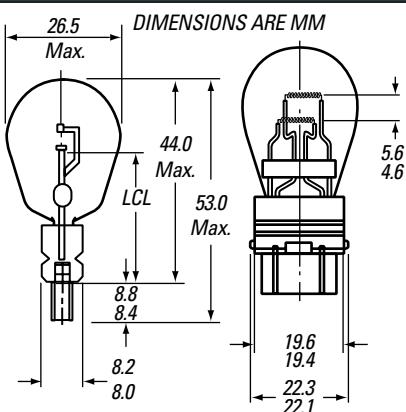
**Fig. 25  
S-8**



**Fig. 27  
S-8**



**Fig. 28  
S-8**



**Fig. 29  
S-8**

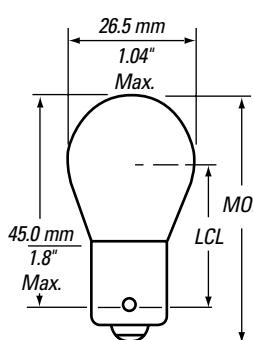
Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
	Blister Pack	Unit Pack	Bulk Pack													
<b>S-8 BULB 1" (25mm) DIAMETER (continued)</b>																
1	14387	22525		<b>3357/3457</b>	Auto Stop, Signal		12.8	2.23A	40	Plastic Wedge	C	C-6	1.10	2.09	400	29
							14.0	.59A	3			C-6			5,000	
2	26379			<b>3357KR/</b>	Auto Stop, Signal. Krypton		12.8	2.23A	40	Plastic Wedge	C	C-6	1.10	2.09	800	29
				<b>3457KR</b>	Fill. Long Life		14.0	.59A	3			C-6			10,000	
3	14388	22526		<b>3357NA/</b>	Auto Stop, Signal –		12.8	2.23A	30	Plastic Wedge	C	C-6	1.10	2.09	400	29
				<b>3457NA</b>	Natural Amber		14.0	.59A	2.2			C-6			5,000	
5	15657			<b>4157KR*</b>	Auto Stop, Signal. Krypton		12.8	2.23A	32	Plastic Wedge	C	C-6	1.10	2.09	3,600	29
					Fill. Long Life		14.0	.59A	3			C-6			10,000	
6	47458			<b>4157NAKR*</b>	Auto Stop, Signal – Natural		12.8	2.23A	24	Plastic Wedge	C	C-6	1.10	2.09	3,600	29
					Amber. Krypton Fill. Long Life		14.0	.59A	2.2			C-6			10,000	
7	37983	37984	<b>198</b>		Truck Stop, Signal –		12.8	2.25A <sup>(147)</sup>	32	D.C. Index	C	C-6	1.25	2.0	1,200	28
					Heavy Duty <sup>(110)</sup>		14.0	.59A	3			C-6			5,000	
8	37985	37986	<b>199</b>		Truck Signal – Heavy Duty <sup>(110)</sup>		12.8	2.25A	32	S.C. Bayonet	C	C-6	1.25	2.0	1,200	24
9	27561	30857	<b>P21/4W*</b>		Auto Stop, Signal –		13.5	1.85A	35	D.C. Index	C	C-6	1.25	2.0	100	28
					European (ECE)		13.5	.37A	1.19			C-6			100	
10	23303	11604	<b>P21/5W</b> <b>(P25-2)</b>		Auto Stop, Signal –		13.5	1.85A	35	D.C. Index	C	C-6	1.25	2.0	250	28
					European (ECE)		13.5	.44A	2.78			C-6			1,000	
11		92475	<b>P21/5W LL*</b>		Auto Stop, Signal –		13.5	1.85A	35	D.C. Index	C	C-6	1.25	2.0	600	28
					European (ECE) – Long Life		13.5	.44A	2.78			C-6			3,000	
12	23306	11601	<b>P21W</b> <b>(P25-1)</b>		Auto Stop – European (ECE)		13.5	1.85A	36.6	S.C. Bayonet	C	C-6	1.25	2.0	250	24
13		38655	<b>P21W LL*</b>		Auto Stop – European (ECE) –		13.5	1.85A	36.6	S.C. Bayonet	C	C-6	1.25	2.0	300	24
					Long Life											
14	41370	32648	<b>PY21W*</b>		Auto Stop – European (ECE) –		13.5	1.85A	22.3	S.C. Bayonet	C	C-6	1.25	2.0	250	24
					Amber Bulb											
15	27496		<b>1634</b>		Instrument, Microscope.		20.0	1.00A	24	D.C. Pf. (A)	C	CC-6	1.25	2.0	200	27
					Illuminator – Burn base up to horiz											
16	26143		<b>305</b>		Aircraft		28.0	.51A	15	S.C. Bayonet	C	C-2V <sup>(13)</sup>	1.12	2.0	300	24
17	26145		<b>305AF</b>		Aircraft – All frosted		28.0	.51A	–	S.C. Bayonet	C	C-2V <sup>(13)</sup>	–	2.0	300	24
18	26152		<b>306</b>		Aircraft		28.0	.51A	15	D.C. Bayonet	C	C-2V <sup>(13)</sup>	1.12	2.0	300	25
19	43132		<b>705</b>		Aircraft		28.0	.51A	15	S.C. Bayonet	C	CC-6	1.12	2.0	900	24
20	40943		<b>1591</b>		Auto		28.0	.61A	15	S.C. Bayonet	C	C-2V <sup>(13)</sup>	1.12	2.0	1,000	24
21	40945		<b>1591AF</b>		Aircraft – All frosted		28.0	.61A	–	S.C. Bayonet	C	C-2V <sup>(13)</sup>	–	2.0	1,000	24
22	27566		<b>1691</b>		Aircraft – 2 identical filaments in series		28.0	.61A	15	S.C. Bayonet	C	2C-2R	1.12	2.0	1,000	24
23	27568		<b>1691AF</b>		Aircraft – All frosted – 2 identical filaments in series		28.0	.61A	–	S.C. Bayonet	C	2C-2R	–	2.0	1,000	24

13. Supported.

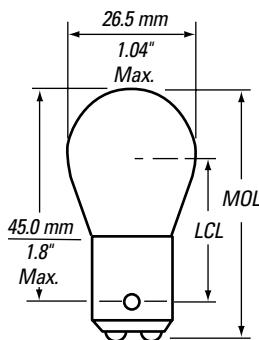
147. Differs from ANSI.

110. To be used with variable load flasher in applications where bulb outage indication is not required, or with an appropriate fixed load flasher. Flash rate may be altered if used with incorrect fixed load flasher.

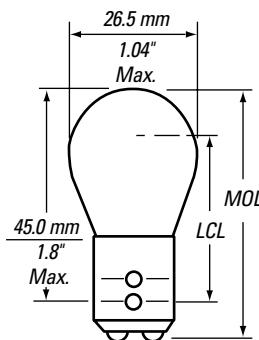
# MINIATURE LAMP SPECIFICATION



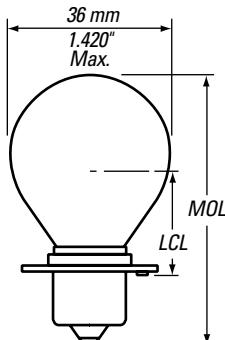
**Fig. 24  
S-8**



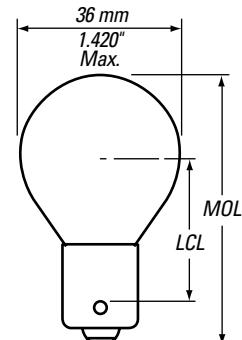
**Fig. 25  
S-8**



**Fig. 28  
S-8**



**Fig. 31  
S-11**



**Fig. 32  
S-11**

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
	Blister Pack	Unit Pack	Bulk Pack													
<b>S-8 BULB 1" (25mm) DIAMETER (continued)</b>																
1	27571		<b>1692</b>		Marine – 2 identical filaments in series		28.0	.61A	15	D.C. Bayonet	C	2C-2R	1.12	2.0	1,000	25
2	34763		<b>2232</b>		Aircraft – Spiral lead		28.0	.643A	18	S.C. Bayonet	C	CC-8	1.19	2.0	2,000	24
3	26702		<b>2232LL*</b>		Aircraft – Spiral lead. Long Life		28.0	.643A	18	S.C. Bayonet	C	CC-8	1.19	2.0	4,000	24
4	43134		<b>2232SB</b>		Aircraft – Spiral lead Top of bulb reflectorized		28.0	.643A	–	S.C. Bayonet	C	CC-8	1.19	2.0	2,000	24
5	26157		<b>307</b>		Aircraft		28.0	.67A	21	S.C. Bayonet	C	C-2V <sup>(13)</sup>	1.12	2.0	300	24
6	26161		<b>307AF</b>		Aircraft – All frosted		28.0	.67A	21	S.C. Bayonet	C	C-2V <sup>(13)</sup>	–	2.0	300	24
7	26168		<b>308</b>		Aircraft		28.0	.67A	21	D.C. Bayonet	C	C-2V <sup>(13)</sup>	1.12	2.0	300	25
8	26171		<b>308AF</b>		Aircraft – All frosted		28.0	.67A	–	D.C. Bayonet	C	C-2V <sup>(13)</sup>	–	2.0	300	25
9	27032		<b>1203</b>		Special Service		28.0	.71A	21	S.C. Bayonet	C	C-2V <sup>(13)</sup>	1.25	2.0	400	24
10	36906		<b>2233</b>		Aircraft – Spiral lead		28.0	.766A	21	S.C. Bayonet	C	CC-8	1.19	2.0	2,000	24
11	27532		<b>1665</b>		Aircraft		28.0	.80A	21	S.C. Bayonet	C	C-2V <sup>(13)</sup>	1.12	2.0	1,000	24
12	27533		<b>1665AF</b>		Aircraft – All frosted		28.0	.80A	–	S.C. Bayonet	C	C-2V <sup>(13)</sup>	–	2.0	1,000	24
13	26238		<b>315</b>		Aircraft		28.0	.90A	32	S.C. Bayonet	C	C-2V <sup>(13)</sup>	1.12	2.0	300	24
14	27529	27530	<b>1662</b>		Aircraft – C-2V Filament inverted <sup>(15,33)</sup>		28.0	.93A	32	D.C. Index	C	CC-6 <sup>(13)</sup>	1.25	2.0	400	28
15		32701	<b>2155</b>		Truck <sup>(15)</sup>		28.0	.93A	32	Wire Terminals	C	CC-6 <sup>(13)</sup>	–	1.75	400	–
							28.0	.34A	6		C	C-2V		1,000		
							28.0	.93A	32				–	1,000		
16		30856	<b>P21/5W*</b>		Bus Stop /Tail-European (ECE)		28.0	1.00A	35	D.C. Index	C	C-6	1.25	2.0	150	28
							28.0	.36A	3.18		C	C-6		1,500		
17	40778		<b>P21W 24V*</b>		Bus Stop-European (ECE)		28.0	1.00A	36.6	S.C. Bayonet	C	C-6	1.25	2.0	150	24
18	27504		<b>1638</b>		Marine – 2 identical filaments in series		28.0	1.02A	32	D.C. Bayonet	C	2C-6	1.25	2.0	500	25
19	27557		<b>1683</b>		Aircraft – 2 identical filaments in series		28.0	1.02A	32	S.C. Bayonet	C	2C-6	1.25	2.0	500	24
20	39904		<b>1229</b>		Special Service, Emergency Lighting		40.0	.38A	15	D.C. Bayonet	C	C-2V <sup>(13)</sup>	1.12	2.0	400	25
<b>S-11 BULB 1 1/8" (35mm) DIAMETER</b>																
21	27431		<b>1561</b>		Instrument, Colorimeter		6.3	4.00A	24	S.C. Pf. (B)	C	C-8Z	.88	2.38	1,500	31
22	26175		<b>309</b>		Aircraft		28.0	.90A	32	S.C. Bayonet	C	C-2V <sup>(13)</sup>	1.25	2.38	300	32
23	26191		<b>311</b>		Aircraft		28.0	1.29A	50	S.C. Bayonet	C	C-2V <sup>(13)</sup>	1.25	2.38	300	32
24	36508		<b>3011</b>		Aircraft		28.0	1.29A	44	S.C. Bayonet	C	C-2V <sup>(13)</sup>	1.25	2.38	1,000	32

13. Supported.

15. This lamp is specially designed for a particular purchaser and may not be suitable for other uses because of its limited mechanical strength.

33. Connections of major and minor filament to base are reversed from those for automotive lamps with Double Contact Index bases. Burn base down to horizontal.

# MINIATURE LAMP SPECIFICATION

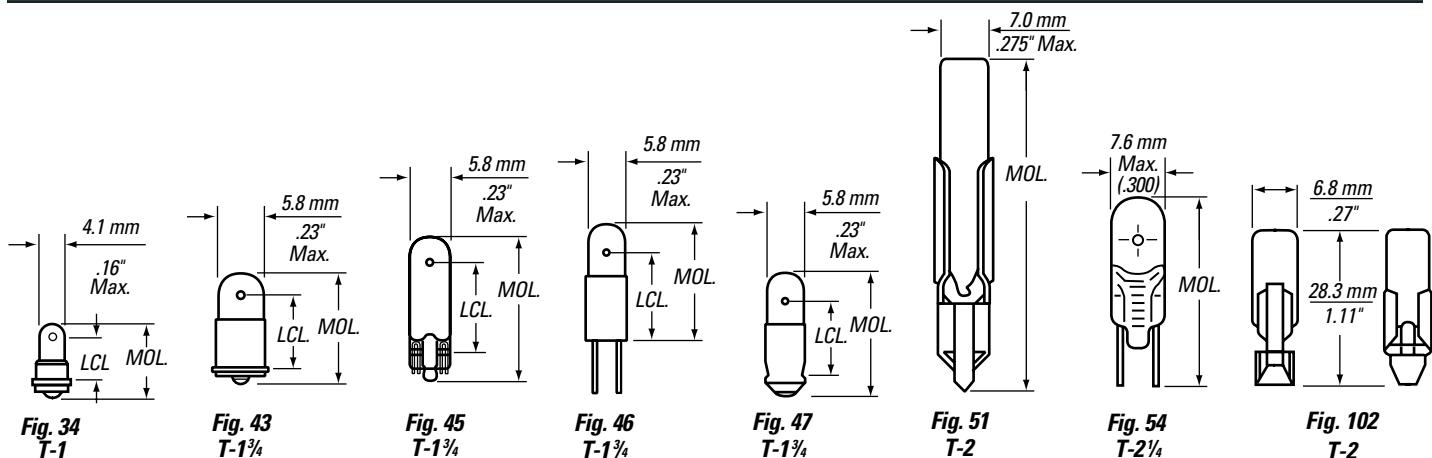


Fig. 34  
T-1

Fig. 43  
T-1 1/4

Fig. 45  
T-1 1/4

Fig. 46  
T-1 1/4

Fig. 47  
T-1 1/4

Fig. 51  
T-2

Fig. 54  
T-2 1/4

Fig. 102  
T-2

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.	
	Blister Pack	Unit Pack	Bulk Pack														
<b>T-1 BULB 1/8" (3mm) DIAMETER</b>																	
1		28706	685		Aircraft		5.0	.06A	.05	Sub-Midget Flanged	B	C-2R	.19	.38	40,000 (79)	34	
<b>T-1 1/4 BULB 7/32" (5.5mm) DIAMETER</b>																	
2	28546		328	Aircraft			6.0	.20A	.34 <sup>(10)</sup>	S.C. Midget Flanged	B	C-2R	.38	.63	1,000	43	
3	40967	40968	86	Indicator			6.3	.20A	.4	Wedge <sup>(130)</sup>	B	C-2F	.40	.80	20,000 (79)	45	
4	28653		381	Indicator			6.3	.20A	.4	S.C. Midget Flanged	B	C-2F	.38	.63	20,000 (79)	43	
5	23015	39218	39219	73	Indicator		14.0	.08A	.3	Wedge	B	C-2F	.40	.80	15,000 (79)	45	
6	28567		330	Aircraft			14.0	.08A	.5	S.C. Midget Flanged	B	C-2F	.38	.63	1,500	43	
7	28657		382	Indicator			14.0	.08A	.3	S.C. Midget Flanged	B	C-2F	.38	.63	40,000 (79)	43	
8	28662		386	Indicator			14.0	.08A	.3	Midget Grooved	B	C-2F	.38	.63	40,000 (79)	47	
9	26480	39220	13689	37	Auto		14.0	.09A	.5	Wedge	B	C-2F	.40	.80	2,500	45	
10	21029	38457	38458	74	Auto		14.0	.10A	.7	Wedge	B	C-2F	.40	.80	1,000	45	
11	43606	43607	70	Auto <sup>(14)</sup>			14.0	.15A	1.5	Wedge	B	C-2F	.40	.80	100	45	
12	40969		85	Indicator			28.0	.04A	.3	Wedge	B	C-2F	.40	.80	7,000 (79)	45	
13	28519		327	Aircraft			28.0	.04A	.34	S.C. Midget Flanged	B	C-2F	.38	.63	4,000 (79)	43	
14	28588		334	Aircraft			28.0	.04A	.34	Midget Grooved	B	C-2F	.38	.63	4,000 (79)	47	
15	28660		385	Indicator <sup>(78)</sup>			28.0	.04A	.15	S.C. Midget Flanged	B	C-2F	.44	.81	10,000 (79)	43	
16	28664		387	Indicator			28.0	.04A	.3	S.C. Midget Flanged	B	C-2F	.38	.63	7,000 (79)	43	
17	28672		388	Indicator			28.0	.04A	.3	Midget Grooved	B	C-2F	.38	.63	7,000 (79)	47	
18	28926		7387	Indicator			28.0	.04A	.3	Bi-Pin M-23	B	C-2F	.50	.61	7,000 (79)	46	
<b>T-2 BULB 1/4" (6.8mm) DIAMETER</b>																	
19	12756		6PSB	Indicator			6.0	.14A	550 <sup>(80)</sup>	Tel. Slide #5	B	C-2V			1.11	20,000	102
20	12760		12PSB	Indicator			12.0	.17A	2,000 <sup>(80)</sup>	Tel. Slide #5	B	C-2F			1.11	12,000	102
21	29001		24E2	Telephone			24.0	.035A	600 <sup>(80)</sup>	Tel. Slide #3	B	C-2F			1.69	7,000	51
22	12071		24PSB	Indicator			24.0	.073A	3,000 <sup>(80)</sup>	Tel. Slide #5	B	C-2F			1.11	10,000	102
23	12072		28PSB	Indicator			28.0	.04A	1,600 <sup>(80)</sup>	Tel. Slide #5	B	C-2F			1.11	5,000	102
24	29041		48C2	Telephone			48.0	.035A	750 <sup>(80)</sup>	Tel. Slide #3	B	C-2F			1.69	5,000	51
25	12075		48PSB	Indicator			48.0	.05A	1,800 <sup>(80)</sup>	Tel. Slide #5	B	C-7A			1.11	10,000	102
26	12077		60PSB	Indicator			60.0	.05A	1,800 <sup>(80)</sup>	Tel. Slide #5	B	C-7A			1.11	7,500	102
27	12080		120PSB	Indicator			120.0	.025A	1,000 <sup>(80)</sup>	Tel. Slide #5	B	CC-7A			1.11	7,500	102
<b>T-2 1/4 BULB 7/32" (7.5mm) DIAMETER</b>																	
28		47618	777	Flashlight, Halogen	306	4.0	1.20A	5.5	G-4 Two Pin <sup>(124)</sup>		C	C-6	.77	1.0	275	54	
29	43760	43761	784	Emergency Lighting - Halogen	306	6.0	1.00A	9	G-4 Two Pin <sup>(124)</sup>		C	C-6	.77	1.0	50	54	
30	43762	43763	785	Emergency Lighting - Halogen	306	6.0	1.33A	13	G-4 Two Pin <sup>(124)</sup>		C	C-6	.77	1.0	50	54	
31	43115	43116	787	Instrument - Halogen	306	6.0	1.67A	16	G-4 Two Pin <sup>(124)</sup>		C	C-6	.77	1.0	100	54	

10. At 5 volts.

14. This lamp is specially designed for a particular purchaser and may not be suitable for other uses because of its excessive wattage requirements for the bulb size.

78. ANSI specifies .38" light center length and .63" maximum overall length.

79. Life shown is AC voltage only. DC life will be approx. 50% of AC.

80. Design end foot candles, not spherical CP.

124. .028" metal pins spaced 44mm (.17") apart. GE's all-glass two-pin lamps might not be compatible with all G-4 sockets since many sockets do not provide clearance for the exhaust tip.

130. Subminiature wedge base lamps under 12 volts have copper-clad outer lead wires to decrease contact resistance at the expense of corrosion resistance in severe environments.

306. See page 50.

## MINIATURE LAMP SPECIFICATION

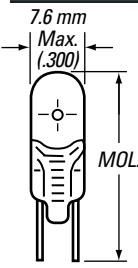


Fig. 54  
T-2 1/4

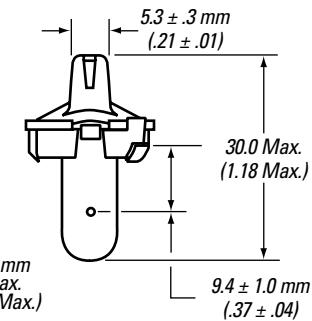
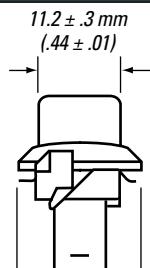


Fig. 56  
T-2 1/4

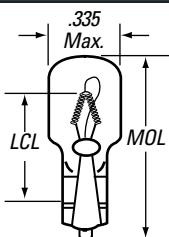


Fig. 57  
T-2 3/4

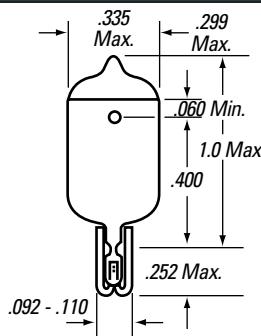


Fig. 58  
T-2 3/4

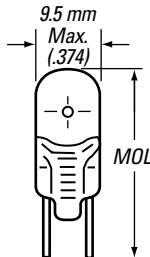


Fig. 55  
T-2 3/4

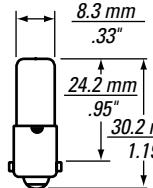


Fig. 104  
T-2 1/2

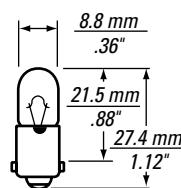


Fig. 113  
T-2 3/4

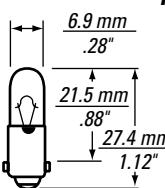


Fig. 114  
T-2 3/4

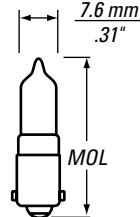


Fig. 115  
T-2 1/2

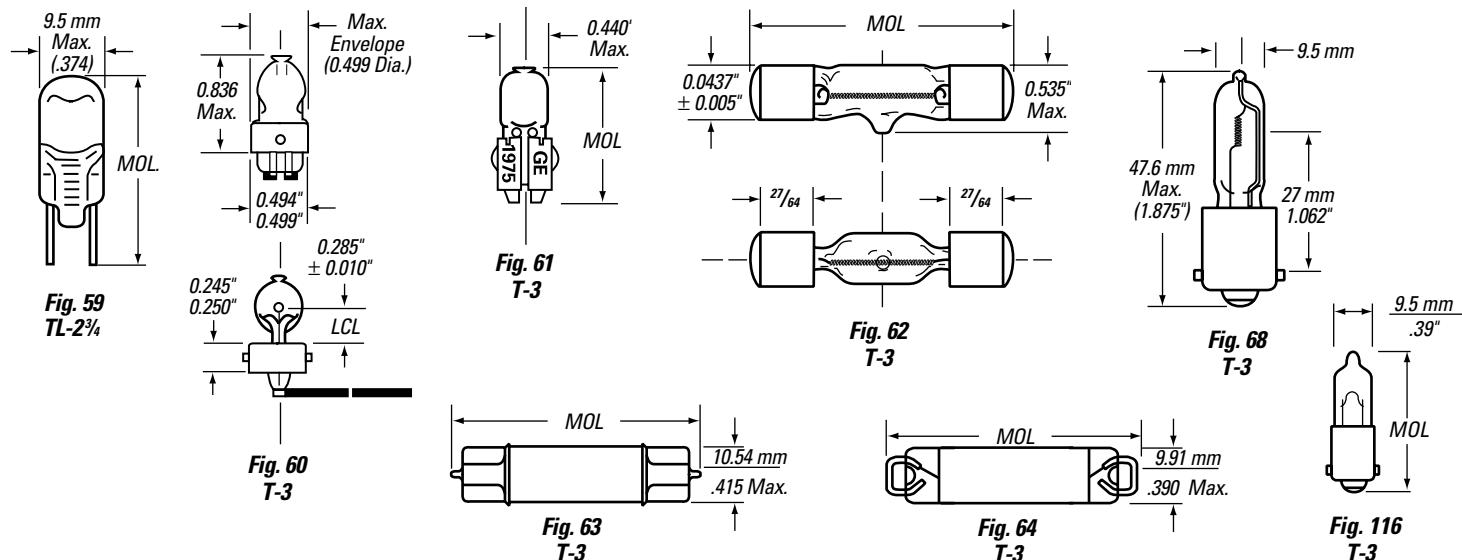
Line No.	Order Code			GE Lamp No.	Primary Application		Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
<b>T-2 1/4 BULB 9/32" (7.5mm) DIAMETER (continued)</b>																	
1	11014	43764	767	Instrument – Halogen	306	6.0	2.00A	19	Miniature Bayonet	C	C-6	.56	1.13	50	114		
2	43764	43765	786	Emergency Lighting – Halogen	306	6.0	2.00A	19	G-4 Two Pin <sup>(124)</sup>	C	C-6	.77	1.0	50	54		
3	43117	43118	788	Instrument – Halogen	306	6.0	3.33A	32	G-4 Two Pin <sup>(124)</sup>	C	C-6	.77	1.0	100	54		
4	12723	12724	774	Emergency Lighting – Halogen	306	12.0	.67A	13	G-4 Two Pin <sup>(124)</sup>	C	C-6	.77	1.0	50	54		
5	44500	44501	783	Emergency Lighting – Halogen	306	12.0	1.00A	22	G-4 Two Pin <sup>(124)</sup>	C	C-6	.77	1.0	50	54		
6	13158	13161	882	Auto Inst. – Halogen	306	12.8	.35A	3.8	Printed Circuit Socket	C	C-6	.37	1.18	2,000	56		
7	18167	16772	882X	Auto Inst. – Halogen	306	12.8	.35A	3.8	G-4 Two Pin <sup>(124)</sup>	C	C-6	.77	1.0	2,000	54		
8	12326	19280	2040	Auto Light Bar	306	12.8	.625A	10.5	Wedge	C	C-6	.40	1.25	500	58		
9	12308	15246	15248	Auto High Mounted Stop, Halogen	306	12.8	.63A	11	G-4 Two Pin <sup>(124)</sup>	C	C-6	.77	1.0	500	54		
<b>T-2 1/2 BULB 5/16" (8.3mm) DIAMETER</b>																	
10	26697		2059*	Aircraft-Reading Lamps – Long Life	304	12.0	.833A	9.1	Miniature Bayonet	C	C-8	0.59	1.30	4,000	115		
11	26698		2059X*	Aircraft-Reading Lamps – Long Life – Blacktopped	304	12.0	.833A	8	Miniature Bayonet	C	C-8	0.59	1.30	4,000	115		
12	12761		28MB	Indicator		28.0	.04A	.29	Miniature Bayonet	B	C-2F	–	1.19	5,000	104		
13	12076		60MB	Indicator		60.0	.05A	.73	Miniature Bayonet	B	C-7A	–	1.19	7,500	104		
14	12078		120MB	Indicator		120.0	.025A	.36	Miniature Bayonet	B	CC-7A	–	1.19	7,500	104		
<b>T-2 3/4 BULB 11/32" (8.7mm) DIAMETER</b>																	
15	49718		778	Instrument – Halogen – High temp. fixtures	306	6.0	3.33A	32	G-4 Two Pin <sup>(124)</sup>	C	C-6	.77	1.05	100	55		
16	11250		773	Special Service – Halogen	306	12.0	.67A	10	G-4 Two Pin <sup>(124)</sup>	C	C-6	.77	1.05	1,000	55		
17	18344		780	Strip Light – Halogen	306	12.0	10W	12	G-4 Two Pin <sup>(124)</sup>	C	C-6	.77	1.05	2,000	55		
18	43119		789	Instrument – Halogen	306	12.0	1.17A	22	G-4 Two Pin <sup>(124)</sup>	C	C-6	.77	1.05	200	55		
19	44840	44841	782	Special Service – Halogen	306	12.0	1.66A	25	G-4 Two Pin <sup>(124)</sup>	C	C-6	.77	1.05	2,000	55		
20	23318		T4W	Auto. ECE T4W GE 2662		13.5	.30A	2.8	Miniature Bayonet	B	C-2R	.59	1.08	450	113		
21	12325	17853	24	Auto Side Marker		14.0	.24A	2	Wedge	B	C-2V	.46	.91	1,500	57		
22	12316		24NA	Auto Side Marker		14.0	.24A	1.5	Wedge	B	C-2V	.46	.91	1,500	57		
23	43121	43122	790	Instrument – Halogen	306	14.0	1.79A	42	G-4 Two Pin <sup>(124)</sup>	C	C-6	.77	1.05	200	55		
24	43123	43124	791	Instrument – Halogen	306	14.0	2.50A	61	G-4 Two Pin <sup>(124)</sup>	C	C-6	.77	1.05	200	55		

124. .028" metal pins spaced 44mm (.157") apart. GE's all-glass two-pin lamps might not be compatible with all G-4 sockets since many sockets do not provide clearance for the exhaust tip.

304. See page 50.

306. See page 50.

## MINIATURE LAMP SPECIFICATION



Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
	Blister Pack	Unit Pack	Bulk Pack													
<b>TL-2<sup>3/4</sup> BULB 1<sup>1/32</sup>" (8.7mm) DIAMETER</b>																
1	43805	2604X			Instrument – Lens end <sup>(128)</sup>	306	5.0	2.00A	<sup>(128)</sup>	G-4 Two Pin <sup>(124)</sup>	C	C-6	–	1.18	5,000	59
<b>T-3 BULB 3/8" (9.5mm) DIAMETER</b>																
2	32780	1974			Instrument – Quartz Bulb – 3" bare leads horizontal	304	6.0	20W	10	Wire Terminals	C	C-6	.285	1.14	10,000	60
3	21494	2074			Instrument – Quartz Bulb	304	7.0	25W	24	Wire Terminals	C	C-6	.285	1.14	2,700	60
4	39641	1962B			Special Service – Quartz Bulb – 9" leads horizontal	304	8.5	62W	110	Wire Terminal	C	C-6	.285	1.14	50	60
5		12859	1962BG		Aircraft – Quartz Bulb – Halogen	304	8.5	62W	110	Wire Terminals	C	C-6	.285	1.14	50	–
6		37947	1962DX		Special Service – Quartz Bulb – 4" bare leads down	304	8.5	62W	80	Wire Terminals	C	C-6	.285	1.14	150	60
7	44152	1962DZ			Special Service – Quartz Bulb – 12" insulated leads down	304	8.5	62W	80	Wire Terminals	C	C-6	.285	1.14	150	60
8	13667	1962TY			Medical – Quartz Bulb – 7 <sup>3/4</sup> " Leads Horizontal	304	8.5	62W	110	Wire Terminals	C	C-6	.285	1.14	50	60
9	38545	1978X			Aircraft Navigation – Quartz Bulb	304	10.0	100W	130	Special	C	C-8	–	2.15	2,000	62
10	38535	1988			Aircraft Gunsight – Quartz Bulb	304	10.0	100W	130	Special Wire Leads	C	C-8	–	2.15	2,000	–
11	14689	3078*			Aircraft Navigation – Quartz Bulb – Long Life	304	10.0	100W	95	Special	C	C-8	–	2.15	4,500	62
12	12673	39224	11803	211-2	Auto		12.8	.97A	12	Miniature Cap	C	C-8	–	1.72	1,000	63
13	12358	39746	11820	561	Auto		12.8	.97A	12	Rigid Loop	C	C-8	–	1.72	1,000	64
14	45591		56110*		Auto-Interior-12V 20W	308	13.2	1.83A	40	Miniature Bayonet	C	C-2R	.59	1.22	100	116
15	47461		58540*		Auto-Interior-12V 5W	308	13.5	.37A	63	Miniature Bayonet	C	C-2R	.59	1.22	240	116
16	40135	39356	11804	214-2	Auto		13.5	.52A	4	Miniature Cap	C	C-8	–	1.72	1,000 <sup>(4)</sup>	63
17	26205		11825	563	Auto		13.5	.52A	4	Rigid Loop	C	C-8	–	1.72	1,000 <sup>(4)</sup>	64
18	23220		11806	212-2	Auto		13.5	.74A	6	Miniature Cap	C	C-8	–	1.72	2,000 <sup>(4)</sup>	63
19	23019		11822	562	Auto		13.5	.74A	6	Rigid Loop	C	C-8	–	1.72	2,000 <sup>(4)</sup>	64
20		28034		1968	Aircraft Gunsight – Quartz Bulb	304	28.0	25W	15	Double Slide	C	C-2V <sup>(13)</sup>	.41	1.17	500	61
21		26696		A-103*	Aircraft-Quartz Bulb-Navigation	304	28.0	50W	60	Special	C	CC-8	–	1.87	1,000	62
22		38627		1982	Aircraft Navigation – Quartz Bulb	304	28.0	75W	110	S.C. Bayonet	C	CC-8 <sup>(13)</sup>	1.06	1.88	1,000	68
23		21061		1982SP	Aircraft – Quartz Bulb	304	28.0	75W	107	S.C. Bayonet	C	CC-6	1.00	1.97	2,000	68

4. At 14 volts.

128. Minimum  $\frac{1}{4}$ " spot at .100" from bulb top

13. Supported.

304. See page 50.

124. .028" metal pins spaced 44mm (.157") apart. GE's all-glass two-pin lamps might not be compatible with all G-4 sockets since many sockets do not provide clearance for the exhaust tip.

306. See page 50.

308. See page 50.

# MINIATURE LAMP SPECIFICATION

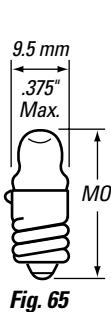


Fig. 65  
TL-3

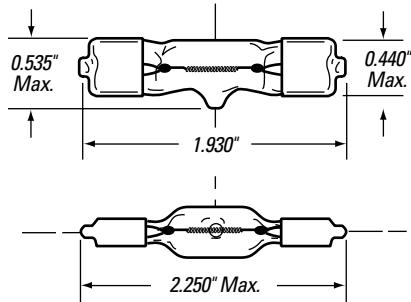


Fig. 66  
T-3

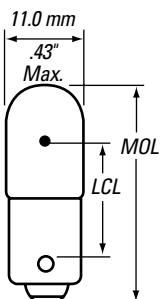


Fig. 70  
T-3 1/4

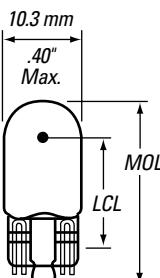


Fig. 71  
T-3 1/4

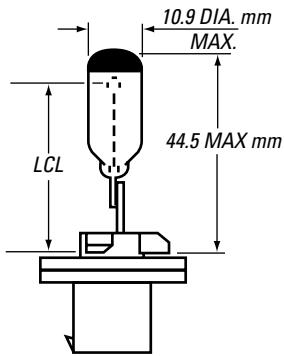


Fig. 72  
T-3 1/4

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
	Blister Pack	Unit Pack	Bulk Pack													
<b>T-3 BULB 3/8" (9.5mm) DIAMETER (continued)</b>																
1	28036		1970	Aircraft – Quartz Bulb	304	28.0	100W	150	Special Sleeve	C	CC-8	–	2.25	1,000	66	
2	41938		1970X	Aircraft – Quartz Bulb	304	28.0	100W	140	Special Sleeve	C	CC-8 <sup>(13)</sup>	–	2.25	1,000	66	
3		19792	2556	Aircraft – Quartz Bulb	304	28.0	200W	525	Two Pin	C	CC-6	.87	1.46	50	–	
4	18617		1946	Aircraft – Quartz Bulb – Halogen	304	28.0	250W	660	Two Pin with Leads	C	CC-6	.87	1.46	50	–	
<b>TL-3 BULB 3/8" (9.5mm) DIAMETER</b>																
5	25848		112	Flashlight – 1AA, C or D cell		1.2	.22A	–	Miniature Screw	B	S-2	–	.93	5 <sup>(116)</sup>	65	
6	26008		222	Flashlight – AA cells		2.25	.25A	–	Miniature Screw	B	C-2R	–	.93	5 <sup>(116)</sup>	65	
7	26063		243	Flashlight – 2 C cells		2.33	.27A	–	Miniature Screw	B	C-2R	–	.93	10 <sup>(116)</sup>	65	
<b>T-3 1/4 BULB 1 3/32" (10mm) DIAMETER</b>																
8	25442		43	Indicator		2.5	.50A	.5	Miniature Bayonet	B	C-2R	.78	1.19	3,000	70	
9	27833		1850	Signal – Plane of filament perpendicular to base pins		5.0	.09A	.25	Miniature Bayonet	B	C-2R	.62	1.19	1,500 <sup>(116)</sup>	70	
10	26243		316	Aircraft		6.0	.70A	3.4	Miniature Bayonet	C	C-2R	.62	1.19	500	70	
11	15731		149	Emergency Lighting		6.15	.53A	3.5	Wedge	B	C-2R	.56	1.06	15	71	
12	25485		47	Radio, TV, and Indicator		6.3	.15A	.52	Miniature Bayonet	B	C-2R	.78	1.19	3,000	70	
13	42758		267	Indicator – Flasher Lamp <sup>(70)</sup>		6.3	.15A	.33	Miniature Bayonet	B	C-2R	.62	1.19	5,000 <sup>(3)</sup>	70	
14	26591		755	Indicator		6.3	.15A	.33	Miniature Bayonet	B	C-2R	.78	1.19	20,000	70	
15	27819		1847	Radio, TV, and Indicator		6.3	.15A	.38	Miniature Bayonet	B	C-2R	.78	1.19	5,000 <sup>(44)</sup>	70	
16	25450		44	Indicator, Radio, and TV		6.3	.25A	.9	Miniature Bayonet	B	C-2R	.78	1.19	3,000	70	
17	26099		259	Radio, TV, and Indicator		6.3	.25A	.65	Wedge	B	C-2R	.65 <sup>(147)</sup>	1.06	5,000 <sup>(44)</sup>	71	
18	44773	44774	555	Coin, Novelty		6.3	.25A	.9	Wedge	B	C-2R	.65	1.06	3,000	71	
19	27868		1866	Radio		6.3	.25A	.65	Miniature Bayonet	B	C-2R	.78	1.19	5,000 <sup>(44)</sup>	70	
20	25916		147	Indicator		7.0	.43A	2	Wedge	B	C-2R	.56	1.06	1,500	71	
21	27179		1408	Signal		10.0	.13A	.85	Miniature Bayonet	B	C-2V <sup>(13)</sup>	.62	1.19	250	70	
22	16481		892	Auto, Signal – Halogen	306	12.8	1.25A	28	Axial	C	C-6	1.00	2.68	300	72	
23	12320		20904	880 Auto Fog. ECE type	306	12.8	2.10A	43 <sup>(160)</sup>	Axial Prefocus / PG13	C	C-6	1.25	2.68	300	72	
24			(H27W/1)	H27W/1 <sup>(17)</sup>		13.5	29W	38		C	C-6	1.25	2.68	150		
25			27582	880L* Auto Fog. ECE type	306	12.8	2.10A	43 <sup>(160)</sup>	Axial Prefocus	C	C-6	1.25	2.68	300	72	
				H27W/1-Long Life <sup>(17)</sup>												
				H27W/1-Sealed Base <sup>(17)</sup>												
				H27W/1-Sealed Base <sup>(17)</sup>												

3. Useful hours.

13. Supported.

17. Filament shielded.

44. At 6.6 volts.

70. These lamps produce a random flashing indication only. While the majority should flash between 40-160 flashes per minute at normal room temperature, some will be outside this range. As ambient temperature and/or input voltage

changes, the flash rate may vary considerably. At rated voltage and room temperature most lamps will flash within 60 seconds.

116. Life tests are performed on DC voltage only.

147. Differs from ANSI

160. Filament will generate specified mscp in a non shielded bulb.

304. See page 50.

306. See page 50.

# MINIATURE LAMP SPECIFICATION

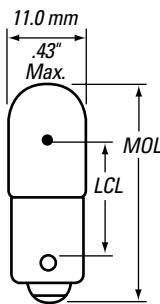


Fig. 70  
T-3/4

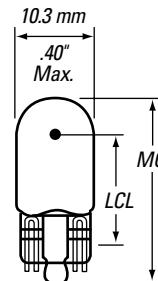


Fig. 71  
T-3/4

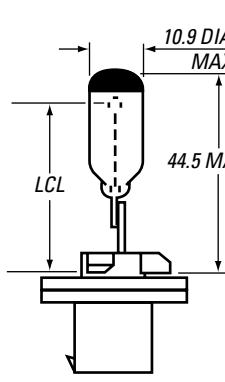


Fig. 72  
T-3/4

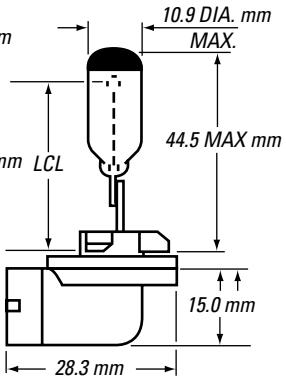


Fig. 73  
T-3/4

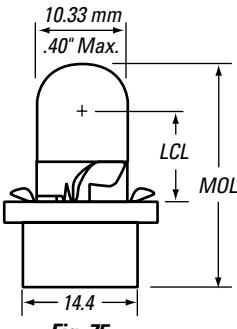


Fig. 75

T-3 1/4  
(For standard 1/2" hole on P.C. Board)

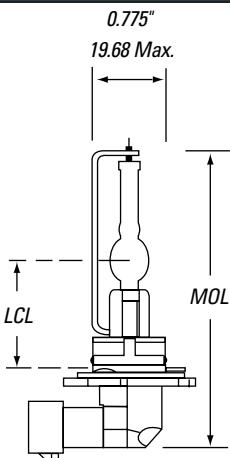


Fig. 108

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
	Blister Pack	Unit Pack	Bulk Pack													
<b>T-3 1/4 BULB 1 3/32" (10mm) DIAMETER (continued)</b>																
1	12334		20905	<b>881</b> (H27W/2)	Auto Fog. ECE type H27W/2 <sup>(17)</sup>	306	12.8	2.10A	43 <sup>(160)</sup>	Right Angle Prefocus / PGJ13	C	C-6	1.25	2.68	300	73
2			27583	<b>881L*</b>	Auto Fog. ECE type H27W/2-Long Life <sup>(17)</sup>	306	12.8	2.10A	43 <sup>(160)</sup>	Right Angle Prefocus	C	C-6	1.25	2.68	1,000	73
3			11646	<b>881X</b>	Auto Fog. ECE type H27W/2-Sealed Base <sup>(17)</sup>	306	12.8	2.10A	43 <sup>(160)</sup>	Right Angle Prefocus	C	C-6	1.25	2.68	300	73
4	12336		20910	<b>889</b>	Auto - Signal, Halogen	306	12.8	2.10A	43	Right Angle	C	C-6	1.00	2.68	300	73
5	12337		20911	<b>890</b>	Auto - Signal, Halogen	306	12.8	2.10A	43	Axial	C	C-6	1.00	2.68	300	72
6		40848	14132	<b>862</b>	Tractor	306	12.8	2.93A	60	Right Angle Prefocus	C	C-6	1.25	2.68	1,900	73
7	12338		20913	<b>893</b>	Auto Fog <sup>(17)</sup>	306	12.8	2.93A	75 <sup>(160)</sup>	Axial Prefocus	C	C-6	1.25	2.68	200 <sup>(4)</sup>	72
8			12727	<b>893X</b>	Auto Fog <sup>(17)</sup>	306	12.8	2.93A	75 <sup>(160)</sup>	Axial Prefocus	C	C-6	1.25	2.68	200 <sup>(4)</sup>	72
9	22112	20238	18455	<b>894</b>	Tractor	306	12.8	2.93A	75	Right Angle Prefocus	C	C-6	1.25	2.68	200 <sup>(4)</sup>	73
10			26345	<b>894X*</b>	Tractor-Sealed Base	306	12.8	2.93A	75	Right Angle Prefocus	C	C-6	1.25	2.68	200 <sup>(4)</sup>	73
11	22113		20914	<b>896</b>	Auto Fog <sup>(17)</sup>	306	12.8	2.93A	75 <sup>(160)</sup>	Right Angle Prefocus	C	C-6	1.25	2.68	200 <sup>(4)</sup>	73
12			12271	<b>898</b>	Auto Fog <sup>(17)</sup>	306	12.8	2.93A	60 <sup>(160)</sup>	Right Angle Prefocus	C	C-6	1.25	2.68	1,900 <sup>(4)</sup>	73
13	22111		12272	<b>899</b>	Auto Fog <sup>(17)</sup>	306	12.8	2.93A	60 <sup>(160)</sup>	Axial Prefocus	C	C-6	1.25	2.68	1,900 <sup>(4)</sup>	72
14	12335		20907	<b>885</b>	Auto Fog	306	12.8	3.90A	100	Axial Prefocus	C	C-6	1.25	2.68	200 <sup>(4)</sup>	72
15	14689		20909	<b>886</b>	Auto Fog	306	12.8	3.90A	100	Right Angle Prefocus	C	C-6	1.25	2.68	200 <sup>(4)</sup>	73
16			25639	<b>887</b>	Tractor Work Light	306	12.8	3.90A	95	Axial Prefocus	C	C-6	1.25	2.68	400 <sup>(4)</sup>	72
17			25703	<b>888</b>	Tractor Work Light	306	12.8	3.90A	95	Right Angle Prefocus	C	C-6	1.25	2.68	400 <sup>(4)</sup>	73
18			41495	<b>9012</b> (HIR2)*	Auto Headlamp Low Beam.	304	12.8	.55W	135	PX 22D	C	C-8	1.25	2.8	900 <sup>(4)</sup>	—
19			14776	<b>9011</b>	Auto Headlamp High Beam. Type HIR1. Halogen Infrared.	304	12.8	.65W	183	PX20D	C	C-8	1.25	3.50	150 <sup>(4)</sup>	108
20			47327	<b>9011X HIR*</b>	Auto Headlamp High Beam. Halogen Infrared.	304	12.8	.65W	183	PX20D	C	C-8	1.25	3.50	150 <sup>(4)</sup>	108
21	12359	27688	<b>1816</b>	Aircraft and Auto		13.0	.33A	3		Miniature Bayonet	B	C-2V <sup>(13)</sup>	.62	1.19	1,000	70
22	27562		35030	<b>W3W</b>	Auto-European ECE	13.5	.3W	1.75		Wedge	B	C-2V <sup>(13)</sup>	.5	1.06	1,000	71
23	18442	18439	<b>590</b>	Sign Auto Strip Lighting (Xenon)		13.5	.37A	4		Wedge	C	C-2V	.5	1.06	2,000	71
24	25837		<b>3652</b>	Auto-Japanese Vehicles		13.5	.37A	6		Wedge	C	—	—	1.06	700	71
25	27563		37640	<b>W5W</b>	Auto-European ECE	13.5	.5W	4		Wedge	C	C-2V <sup>(13)</sup>	.5	1.06	300	71
26	39999	40000	<b>658</b>	Indicator		14.0	.08A	0.31		Wedge	B	C-2F	0.56	1.06	15,000	71
27	26593		<b>756</b>	Indicator		14.0	.08A	.31		Miniature Bayonet	B	C-2F	.62	1.19	15,000	70
28	23016	25956	16489	<b>161</b>	Auto, Instrument	14.0	.19A	1		Wedge	B	C-2F	.56	1.06	4,000	71
29			23036	<b>PC161</b>	Auto Instrument	14.0	.19A	1		Printed Circuit Socket	B	C-2F	.45	1.11	4,000	75

4. At 14 volts.

13. Supported.

17. Filament shielded.

160. Filament will generate specified mscp in a non shielded bulb.

304. See page 50.

306. See page 50.

## MINIATURE LAMP SPECIFICATION

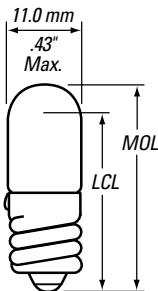


Fig. 69  
T-3 1/4

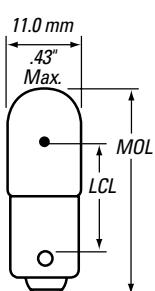


Fig. 70  
T-3 1/4

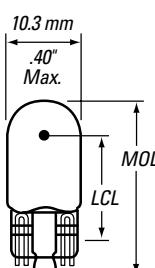


Fig. 71  
T-3 1/4

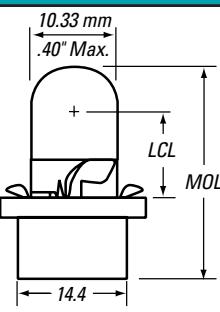


Fig. 75  
T-3 1/4

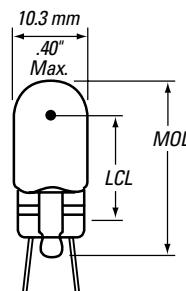


Fig. 111  
T-3 1/4

(For standard  $\frac{1}{2}$ " hole on P.C. Board)

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
	Blister Pack	Unit Pack	Bulk Pack													
<b>T-3 1/4 BULB 1 1/32" (10mm) DIAMETER (continued)</b>																
1	27356		1487		Indicator		14.0	.20A	1.4	Miniature Screw	B	C-2F	.94	1.19	3,000	69
2	27677	27679	1815		Indicator		14.0	.20A	1.4	Miniature Bayonet	B	C-2F <sup>(147)</sup>	.75	1.19	3,000	70
3	25931	25933	158		Auto, Instrument, and Indicator		14.0	.24A	2	Wedge	B	C-2V <sup>(13)</sup>	.56	1.06	500	71
4	25199	25200	591		Sign Auto Strip Lighting (Xenon)		14.0	.24A	2	Wedge	C	C-2V	.5	1.06	3,000	71
5	12331	27917	1891		Auto, Radio and Indicator		14.0	.24A	2	Miniature Bayonet	B	C-2F	.62	1.19	500	70
6	12328	25965	16303	194	Auto, Instrument		14.0	.27A	2	Wedge	B	C-2F	.56	1.06	2,500	71
7	12356		194B		Auto courtesy – Blue silicone coating <sup>(132)</sup>		14.0	.27A	2	Wedge	B	C-2F	–	1.06	2,500	71
8	12357		194G		Auto courtesy – Green silicone coating <sup>(132)</sup>		14.0	.27A	2	Wedge	B	C-2F	–	1.06	2,500	71
9	12319	44859	27470	194NA	Auto Side marker – Natural Amber bulb		14.0	.27A	1.5	Wedge	B	C-2F	–	1.06	2,500	71
10	47794		194NAXL*		Auto Side marker – Natural Amber bulb – Long Life		14.0	.27A	1.5	Wedge	B	C-2F	–	1.06	5,000	71
11	12355	21618	194R		Auto courtesy – Red silicone coating – Heavy Duty <sup>(132)</sup>		14.0	.27A	2	Wedge	B	C-2F	–	1.06	2,500	71
12	25832		194XL		Auto, Long Life		14.0	.27A	2	Wedge	B	C-2F	.56	1.06	12,000	71
13	27907		1889		Auto – Heavy Duty		14.0	.27A	2	Miniature Bayonet	B	C-2F	.56	1.19	2,000	70
14	72221	23021	PC194		Auto Inst. & Ind., H.D.		14.0	.27A	2	Printed Circuit Socket	B	C-2F	.45	1.11	2,500	75
15	19553	19852	193		Heavy Duty Truck		14.0	.33A	2	Wedge	B	C-2F	.56	1.06	15,000	71
16		19921	193E		Heavy Duty Truck – $\frac{9}{16}$ " leads up		14.0	.33A	2	Wedge, Wire Terminal <sup>(122)</sup>	B	C-2F	.56	1.06	15,000	111
17		11807	193E-1		Truck Clearance – $\frac{9}{16}$ " leads up		14.0	.33A	2	Wedge, Wire Terminal <sup>(122)</sup>	B	C-2F	–	1.06	15,000	111
18	12332	27935	27937	1893	Auto – Heavy Duty		14.0	.33A	2	Miniature Bayonet	B	C-2F	.62	1.19	7,500	70
19	12327	25962	16302	168	Auto Instrument		14.0	.35A	3	Wedge	B	C-2F	.56	1.06	1,500	71
20	47827		168XL*		Auto Instrument-Long Life		14.0	.35A	3	Wedge	B	C-2F	.56	1.06	3,000	71
21		44964	2286D		Auto/Truck		14.0	.35A	2.7	Wire Term Down	B	C-2F	–	1.05	1,500	–
22	27222	23037	PC168		Auto Instrument		14.0	.35A	3	Printed Circuit Socket	B	C-2F	.45	1.11	1,500	75
23	27667		1813		Radio		14.4	.10A	.86	Miniature Bayonet	B	C-2V <sup>(13)</sup>	.62	1.19	1,000	70
24	27927		1892		Auto and Indicator		14.4	.12A	.75	Miniature Bayonet	B	C-2F	.62	1.19	1,000	70
25	27707		1818		Aircraft		24.0	.17A	3.3	Miniature Bayonet	B	C-2F <sup>(147)</sup>	.62	1.19	250	70
26	27816		1843		Indicator <sup>(15)</sup>		28.0	.022A	.2	Miniature Bayonet	B	C-2F	.62	1.19	3,000	70
27	27711	27712	1819		Indicator		28.0	.04A	.34	Miniature Bayonet	B	C-2F	.62	1.19	2,500	70
28	38866		656		Indicator		28.0	.06A	.62	Wedge	B	C-2F	.56	1.06	2,500	71
29	27776		1829		Indicator		28.0	.07A	1	Miniature Bayonet	B	C-2F	.62	1.19	1,000	70
30	38196		657		Indicator		28.0	.08A	.62	Wedge	B	C-2F	.56	1.06	15,000 <sup>(79)</sup>	71

13. Supported.

15. This lamp is specially designed for a particular purchaser and may not be suitable for other uses because of its limited mechanical strength.

79. Life shown is AC voltage only. DC life will be approx. 50% of AC.

122. This is a wire terminal lamp. The glass-to-metal seal (and tip where applicable) are susceptible to damage by thermal shock, and soldering or welding within  $\frac{1}{8}$ " of the glass should be avoided as glass cracks and air leaks may develop.

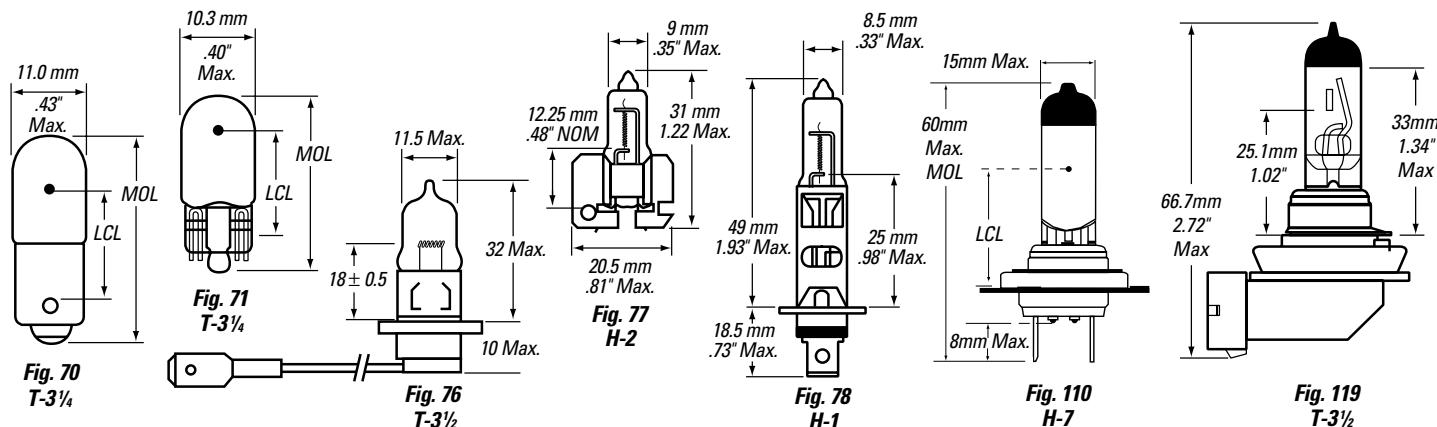
36. Solderability may be adversely affected by storage for an extended period in

excess of six months or by storage in a high humidity environment. Lamps with tinned leads would be subject to these storage restrictions. Nickel-plated leads are not recommended for soldering; however, their ability to be welded is not affected by these storage restrictions.

132. Paint may peel, craze or discolor when subjected to excessive moisture, heat, and freezing in housings with plugged drain holes or which otherwise leak or trap moisture.

147. Differs from ANSI.

## MINIATURE LAMP SPECIFICATION



Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.	
	Blister Pack	Unit Pack	Bulk Pack														
<b>T-3 1/4 BULB 1 1/32" (10mm) DIAMETER (continued)</b>																	
1	26599	757			Indicator		28.0	.08A	.62	Miniature Bayonet	B	C-2F	.62	1.19	15,000	(79)	70
2	38918	400			Aircraft		28.0	.10A	1.6	Wedge	B	C-2F	.56	1.06	1,000		71
3	27727	1820			Indicator		28.0	.10A	1.6	Miniature Bayonet	B	C-2F	.62	1.19	1,000		70
4	26212	26214	313		Aircraft		28.0	.17A	3.5	Miniature Bayonet	B	C-2F	.62	1.19	500		70
5	39645	464			Aircraft		28.0	.17A	3	Wedge	B	C-2F	.56	1.06	1,500		71
6	27862	27863	1864		Aircraft		28.0	.17A	3	Miniature Bayonet	B	C-2F	.62	1.19	1,500		70
7	40383	1873			Aircraft		28.0	.20A	3	Miniature Bayonet	B	C-2F	.62	1.19	7,000		70
8	27749	1822			Indicator		36.0	.10A	2.1	Miniature Bayonet	B	C-2F	.62	1.19	1,000		70
9	27772	1828			Indicator		37.5	.05A	.65	Miniature Bayonet	B	C-2F	.62	1.19	3,000		70
10	27804	1835			Indicator		55.0	.05A	1.1	Miniature Bayonet	B	C-2F	.62	1.19	5,000		70
<b>TL-3 1/4 BULB 1 1/32" (10mm) DIAMETER</b>																	
11	38269	558			Auto and Indicator Lens end	(68)		13.0	.33A	—	Wedge	C	C-2V (13)	—	1.06	500	71
<b>T-3 1/2 BULB 7/16" (11.5mm) DIAMETER</b>																	
12		23442	50390 (H3-35)		C.I.M. H3-35W 12V		308	13.2	40W	60	PK22S	C	C-6	.71	1.65	200	76
13		15765	H8*		Auto ECE Fog		308	13.2	40W	64	PGJ19-1	C	C-8	1.06	2.63	400 (2)	119
14		15828	H11*		Auto ECE Low Beam		308	13.2	55W	107	PGJ19-2	C	C-8	1.07	2.63	550 (2)	119
15		15963	H11LL*		Auto ECE Low Beam		308	13.2	55W	107	PGJ19-2	C	C-8	1.07	2.63	1,400 (4)	119
16	26374	35755	58520 (H7-55)		Auto ECE, DOT H7, 55W 12V		308	13.2	56.5W	115	PX26D	C	C-8	.98	2.36	500	110
17	40336	27328	32376	50310/1 (H1-55)	Auto ECE H1-55W 12V		308	13.2	62W	123	P14.5S	C	C-8	1.08	2.66	225	78
18	12339	27331	22132	50340 (H3-55)	Auto ECE H3-55W 12V		308	13.2	62W	115	PK22S	C	C-6	.71	1.65	225	76
19		23445	50340HD (H3-55)		C.I.M. H3-55W 12V		308	13.2	62W	111	PK22S	C	C-6	.71	1.65	600	76
20		27330	22130	50410 (H2-55)	Auto ECE H2-55W 12V		308	13.2	62W	143	X511	C	C-8	.48	1.22	225	77
21		35044	50340LL (H3-55)		Auto ECE H3-55W 12V Long Life		308	13.2	64W	106	PK22S	C	C-6	.71	1.65	2,000	76
22		15827	H9*		Auto ECE High Beam		308	13.2	65W	167	PGJ19-5	C	C-8	1.08	2.63	125 (2)	119
23	12341		52130 (H3-100)		Off Road Auxiliary H3-100W 12V		308	13.2	92W	187	PK22S	C	C-6	.71	1.65	100	76
24		27329	52140 (H1-100)*		Off Road Auxiliary H1-100W 12V		308	13.2	100W	219	P14.5S	C	C-8	1.08	2.66	100	78
25		23428	52590HD		C.I.M. H3-65W 24V		308	28.0	66W	102	PK22S	C	C-6	.71	1.65	1,000	76
26		27332	23438	50350	C.I.M. H3-70W 24V		308	28.0	75W	135	PK22S	C	CC-6	.71	1.65	225	76
27		27569	50320/1		Auto. ECE H1-70W 24V		308	28.0	80W	151	P14.5S	C	C-8	1.08	2.46	600	78

2. B<sub>3</sub> life, not average life.

4. At 14 volts.

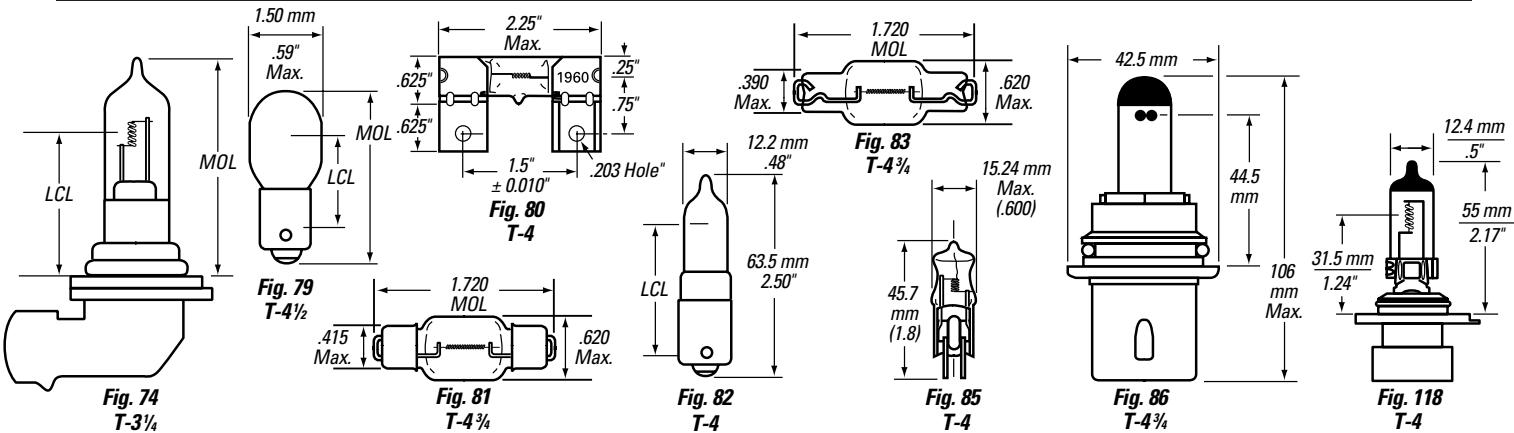
13. Supported.

68. Uses lens-end TL-3 1/4 bulb. Provides 7,000 to 11,000 foot-candles in a 1/4" diameter spot at 1/8" from end of bulb.

79. Life shown is AC voltage only. DC life will be approx. 50% of AC.

308. See page 50.

## MINIATURE LAMP SPECIFICATION



Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
	Blister Pack	Unit Pack	Bulk Pack													

### T-4 BULB 1/2" (13mm) DIAMETER

1	39718	1983	Aircraft – Navigation – Quartz bulb	304	10.0	100W	130	Two Pin	C	C-8	1.25	1.80	2,000	85		
2	40843	37735	9145 (H10)*	306	12.8	45W	65	PY20D	C	C-8	1.24	3.01	1,500 <sup>(4)</sup>			
3	20469	795	Signal – Halogen	306	12.8	50W	108	S.C. Bayonet	C	C-6	1.25	2.50	200 <sup>(4)</sup>	82		
4	18510	13397	14711	9006/HB4	Auto Headlamp, Low Beam. Type HB4	306	12.8	55W	80	Right Angle Plastic, Prefocus	C	C-8	1.24	3.13	850 <sup>(4)</sup>	74
5	47640		9006HO*	306	12.8	55W	80	Right Angle Plastic, Prefocus	C	C-8	1.24	3.13	1000 <sup>(4)</sup>	74		
6	45473		9006SB*	306	12.8	55W	80	Right Angle Plastic, Prefocus	C	C-8	1.24	3.13	320 <sup>(4,75)</sup>	74		
7	45868		9006XSLL*	306	12.8	55W	80	Axial Plastic Prefocus	C	C-8	1.24	3.13	2,000 <sup>(4)</sup>	118		
8	18509	13384	14710	9005/HB3	Auto Headlamp, High Beam. Type HB3	306	12.8	65W	135	Right Angle Plastic, Prefocus	C	C-8	1.24	3.13	800 <sup>(4)</sup>	74
9	45472		9005SB*	306	12.8	65W	135	Right Angle Plastic, Prefocus	C	C-8	1.24	3.13	150 <sup>(4,75)</sup>	74		
10	45866		9005XSLL*	306	12.8	65W	135	Axial Plastic Prefocus	C	C-8	1.24	3.13	700 <sup>(4)</sup>	118		
11	28011	1958		304	28.0	150W	250	Tab	C	CC-8	.75	2.25	300	80		
12	47695	1987		304	28.0	150W	240	D.C. Bayonet	C	CC-6	1.18	2.44	700	–		
13	44717	1986		304	28.0	250W	600	Wire Terminal S.C. Prefocus Collar	C	CC-6	1.03	2.00	100	–		
14		19566	2586	304	28.0	250W	600	Two Pin with Insulation Leads	C	CC-6	1.30	1.90	100	–		

### T-4 1/2 BULB 9/16" (14mm) DIAMETER

15	27392	1495	Aircraft <sup>(14)</sup>	28.0	.30A	6	Miniature Bayonet	B	C-2F	.62	1.38	500	79
16	44842	1495X	Aircraft – Gas filled	28.0	.30A	6	Miniature Bayonet	C	C-2F	.62	1.38	500	79

### T-4 3/4 BULB 1 1/32" (15.2mm) DIAMETER

17	23020	577	Auto	12.8	1.40A	21	Double End Cap	C	C-8	–	1.72	1,000	81	
18	12672	570	Truck Bed Light	12.8	2.10A	32	Rigid Loop	C	C-8	–	1.72	600	83	
19	18508	13382	9004/HB1	306	12.8	65W	95 <sup>(161)</sup>	Axial Plastic Prefocus	C	C-6	–	4.17	150 <sup>(4)</sup>	86
20	27561	9004HO*	Auto Headlamp High/Low Beam. Type HB1	12.8	45W	55 <sup>(161)</sup>	Axial Plastic Prefocus	C	C-6	1.75	–	320		
21	45471	9004SB*	Auto Headlamp High/Low Beam. Type HB1. Higher output.	12.8	65W	95 <sup>(161)</sup>	Axial Plastic Prefocus	C	C-6	1.75	–	4.17	150 <sup>(4)</sup>	86
22	13993	11249	Auto Headlamp High/Low Beam. Type HB1. Coated for White Light.	12.8	45W	56 <sup>(161)</sup>	Axial Plastic Prefocus	C	C-6	1.75	–	200		
		20559	9004XL	12.8	65W	95 <sup>(161)</sup>	Axial Plastic Prefocus	C	C-6	1.75	–	4.17	150 <sup>(4)</sup>	86
				12.8	47W	55 <sup>(161)</sup>	Axial Plastic Prefocus	C	C-6	1.75	–	850		

4. At 14 volts.

161. MSCP measured with black top.

75. Estimated. Based on limited test information.

304. See page 50.

306. See page 50.

## MINIATURE LAMP SPECIFICATION

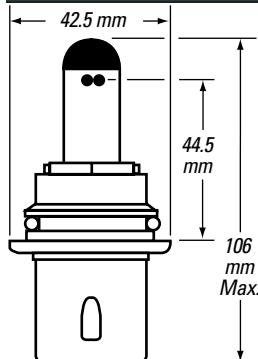


Fig. 86  
T-4 3/4

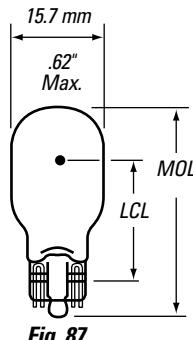


Fig. 87  
T-5

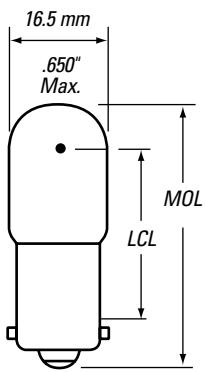


Fig. 88  
T-5

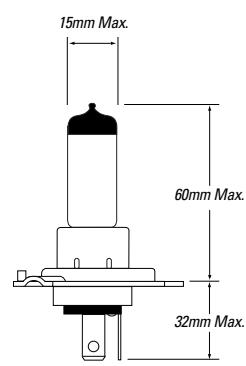


Fig. 107  
T-5

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.	
	Blister Pack	Unit Pack	Bulk Pack														
<b>T-4 3/4 BULB 1 1/32" (15.2mm) DIAMETER (continued)</b>																	
1	22388	20551		9007/HB5	Auto Headlamp High/Low Beam. Type HB5.	306	12.8	65W	107 <sup>(161)</sup>	Axial Plastic Prefocus	C	C-8	—	4.17	150 <sup>(4)</sup>	86	
2	47642			9007HO*	Auto Headlamp High/Low Beam. HB5. Higher Output.	306	12.8	65W	107 <sup>(161)</sup>	Axial Plastic Prefocus	C	C-8	1.75	—	1,100	86	
3			10209	9007LL	Auto Headlamp High/Low Beam. HB5. Long life	306	12.8	65W	107 <sup>(161)</sup>	Axial Plastic Prefocus	C	C-8	1.75	—	320	86	
4	45474			9007SB*	Auto Headlamp High/Low Beam. HB5. Coated for White Light	306	12.8	65W	107 <sup>(161)</sup>	Axial Plastic Prefocus	C	C-8	—	4.17	110 <sup>(4)</sup>	86	
5	22432	22389	14542	9003/HB2	Auto Headlamp High/Low Beam. Type HB2/H4	306	12.8	67W	119	P43T-38	C	C-8	1.12	3.62	150 <sup>(4)</sup>	107	
6	45470			9003SB*	Auto Headlamp High/Low Beam. Coated for White Light.	306	12.8	67W	119	P43T-38	C	C-8	1.12	3.62	800	150 <sup>(4)</sup>	107

### T-5 BULB 5/8" (16mm) DIAMETER

7	27889		1876	Photoelectric Scanner – Silver Plated contact (A.A. tol. 1/64")	3.5	2.50A	6.5	S.C. Bayonet	C	C-6	1.12	1.75	2,000	88	
8	27193		1434	Instrument, Photocell exciter – Silver Plated contact	3.7	2.75A	11	S.C. Bayonet	C	C-6	1.12	1.75	100	88	
9	44769		914	Emergency Lighting	4.0	.90A	3.5	Wedge	C	C-6	0.75	1.49	50	87	
10	13483		926	Emergency Lighting	4.0	1.80A	7.5	Wedge	C	C-2R	0.81	1.49	50	87	
11	44756	44757	909	Emergency Lighting	6.0	.62A	3	Wedge	C	C-2R	0.81	1.49	50	87	
12	16975	15285	939	Emergency Lighting	6.0	.90A	5.4	Wedge	C	C-2R	0.81	1.49	50	87	
13	13485	13486	927	Emergency Lighting	6.0	1.20A	8	Wedge	C	C-2R	0.81	1.49	50	87	
14	44754	44755	908	Emergency Lighting	6.0	1.50A	12	Wedge	C	C-2R	0.81	1.49	50	87	
15	44771	44772	915	Emergency Lighting	12.0	.75A	11	Wedge	C	C-2R	0.81	1.49	50	87	
16	14273	14007	901	Garden & Security Lighting	12.8	.31A	2.9	Wedge	C	C-2R	0.81	1.49	500	87	
17	40675		901A*	Garden & Security Lighting – Amber/Yellow Coating	12.8	.31A	-	Wedge	C	C-2R	0.81	1.49	500	87	
18	40179	17837	14008	918	Garden & Security Lighting	12.8	.56A	6.5	Wedge	C	C-2R	.81	1.49	500	87
19	40180		923	Garden & Security Lighting	12.8	.91A	12.5	Wedge	C	C-2R	.81	1.49	500	87	
20	23027	13274	13275	922	Auto – Heavy Duty	12.8	.98A	15	Wedge	C	C-2R	.81	1.49	200	87
21	12365	40504	40505	912	Auto – Heavy Duty	12.8	1.00A	12	Wedge	C	C-2R	.81	1.49	1,000	87
22	26199		920	Auto	12.8	1.20A	10	Wedge	C	—	.81	1.49	1,200	87	
23	12307	43374	11743	921	Auto – Heavy Duty <sup>(121)</sup>	12.8	1.40A	21	Wedge	C	C-2R	.81	1.49	500	87
24	23026	21860		916NA	Auto, Side Marker, Natural Amber	13.0	.54A	1.5	Wedge	C	C-2F	.81	1.49	10,000	87
25	12366	40289	40290	906	Auto – Heavy Duty	13.0	.69A	6	Wedge	C	C-2F	.81	1.49	1,000	87
26			48505	906A*	Auto, Side Signal-Amber/Yellow Coating	13.0	.69A	-	Wedge	C	C-2F	.81	1.49	1,000	87

4. At 14 volts.

75. Estimated. Based on limited test information.

121. To minimize the possible adverse effects on lamp life due to excessive wattage in relationship to bulb size: Burn Base Down to Base 45° Above

Horizontal. Regardless of burning position, this excessive wattage will abnormally decrease light output during lamp life.

161. MSCP measured with black top.

306. See page 50.

## MINIATURE LAMP SPECIFICATION

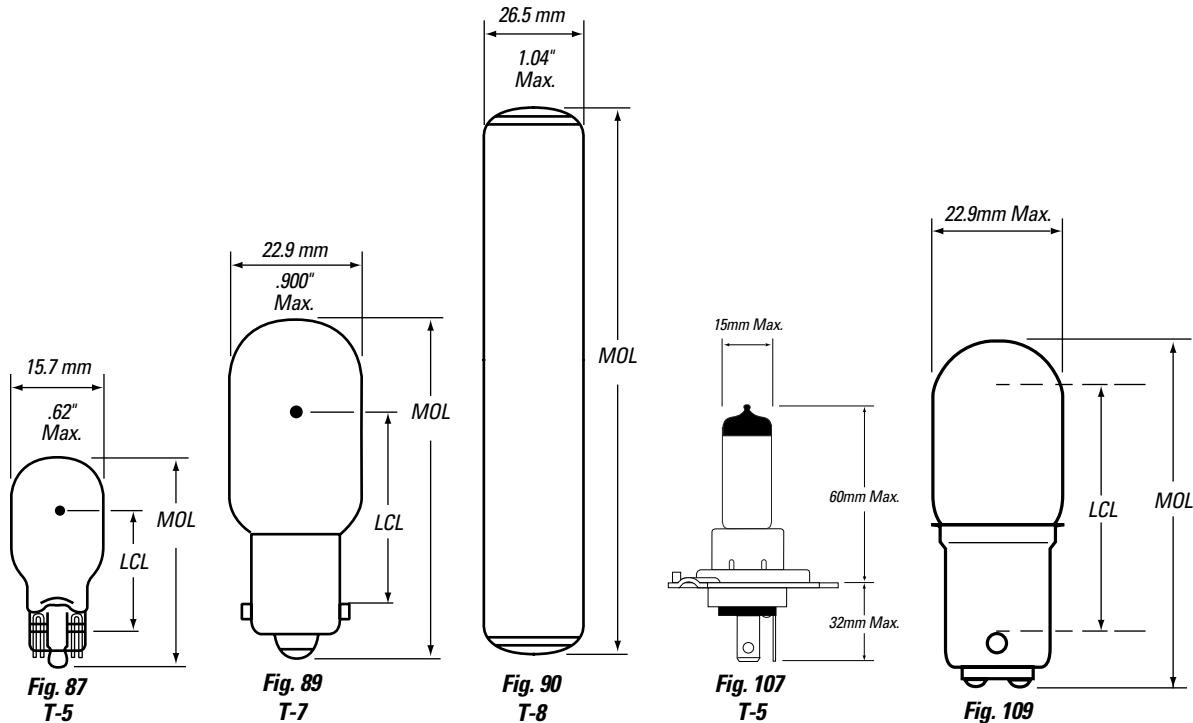


Fig. 87  
T-5

Fig. 89  
T-7

Fig. 90  
T-8

Fig. 107  
T-5

Fig. 109

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
<b>T-5 BULB <math>\frac{5}{8}</math>" (16mm) DIAMETER (continued)</b>																
1	18132	27334	22133	<b>50440</b> (H4-60/55)	Auto ECE H4-12V 60/55W	306	13.2	71W 13.2	138 66W 80	P43T-38	C	C-8 C-8	1.12	3.62	225 900	107
2	23025	16289	16288	<b>916</b>	Auto, Side Marker		13.5	.54A	2	Wedge	C	C-2F	.81	1.49	10,000	87
3	23024	40462	40463	<b>904</b>	Auto - Heavy Duty		13.5	.69A	4	Wedge	C	C-2F	.81	1.49	5,000 <sup>(4)</sup>	87
4		26353	<b>W16W</b>	Auto ECE W16W <sup>(12)</sup>			13.5	1.44A	24.6	Wedge	C	C-2F	.81	1.49	250	87
5		27342	30833	<b>50450</b> (H4-75/ 70/28V)	Bus ECE H4 H4-24V 75/70W	308	28.0	80W 28.0	151 73W 95	P43T-38	C	C-8 C-8	1.14	3.62	150 300	107
<b>T-7 BULB <math>\frac{7}{8}</math>" (20mm) DIAMETER</b>																
6	25834			<b>3496</b>	Auto Stop, Tail Japanese Vehicles		12.8	2.10A	43	D.C. Index	C	C-6 C-6	-	2.00	600	109
7	25835			<b>3497</b>	Auto Stop, Signal Japanese Vehicles		14.0	.59A	3					5,000		
8	26200			<b>7440</b>	Auto Stop, Signal Japanese Vehicles		12.8	2.10A	45	S.C. Bayonet	C	C-6	-	2.00	600	89
9	26201		10014	<b>7443</b>	Auto Stop, Tail Japanese Vehicles		13.5	1.85A	37	Wedge / 103 x 16DQ	C	C-6	-	1.75	300	-
10		28008		<b>1940</b>	Auto Stop, Tail Japanese Vehicles		13.5	1.85A	35	Wedge / 103 x 16DQ	C	C-6 C-6	-	1.75	500	-
11	37034			<b>1944</b>	Aircraft Marker		13.5	0.4A	3					1,000		
12	34021			<b>1939X</b>	Special Service - Silver contact Aircraft Marker		14.0	3.57A	75	S.C. Bayonet	C	C-8Z	1.25	2.16	300	89
13		12571		<b>ML20/ OF-28</b>	Aircraft - Lumiline - Inside Frosted		28.0	20W	-	Disk	B	2C-8	-	5.75 <sup>(12)</sup>	500	90

4. At 14 volts.

12. Average overall length.

13. Supported.

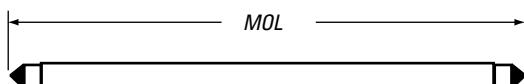
121. To minimize the possible adverse effects on lamp life due to excessive wattage in relationship to bulb size: Burn Base Down to Base 45° Above

Horizontal. Regardless of burning position, this excessive wattage will abnormally decrease light output during lamp life.

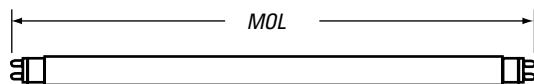
306. See page 50.

308. See page 50.

## MINIATURE LAMP SPECIFICATION



**Fig. 93**  
T-5



**Fig. 94**  
T-5

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Approx. Lumens**	Base	Bulb	Nominal Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
	Blister Pack	Unit Pack	Bulk Pack											
<b>ELECTRIC DISCHARGE LAMPS – FLUORESCENT T-5 BULB <math>\frac{5}{8}</math>" (16mm) DIAMETER***</b>														
1	28154			<b>5004CW</b>	Aircraft – Cool White	309	A.C.	4W	150	Miniature Pinless	T5	6.00	7,500 (162)	93
2	28155			<b>5004WW</b>	Aircraft – Warm White	309	A.C.	4W	140	Miniature Pinless	T5	6.00	7,500 (162)	93
3	27367			<b>5104CW*</b>	Aircraft – Cool White	309	A.C.	4W	150	Miniature Bi-Pin	T5	6.00	7,500 (162)	94
4	28173			<b>5104WW</b>	Aircraft – Warm White	309	A.C.	4W	140	Miniature Bi-Pin	T5	6.00	7,500 (162)	94
5	12774			<b>5106CW</b>	Aircraft – Cool White	309	A.C.	6W	310	Miniature Bi-Pin	T5	9.00	7,500 (162)	94
6	33612			<b>5106WW</b>	Aircraft – Warm White	309	A.C.	6W	300	Miniature Bi-Pin	T5	9.00	7,500 (162)	94
7	28160			<b>5008CW</b>	Aircraft – Cool White	309	A.C.	8W	445	Miniature Pinless	T5	12.00	7,500 (162)	93
8	28163			<b>5008WW</b>	Aircraft – Warm White	309	A.C.	8W	435	Miniature Pinless	T5	12.00	7,500 (162)	93
9	27466			<b>5108CW*</b>	Aircraft – Cool White	309	A.C.	8W	445	Miniature Bi-Pin	T5	12.00	7,500 (162)	94
10	28175			<b>5108WW</b>	Aircraft – Warm White	309	A.C.	8W	435	Miniature Bi-Pin	T5	12.00	7,500 (162)	94
11	28168			<b>5013CW</b>	Aircraft – Cool White	309	A.C.	13W	820	Miniature Pinless	T5	21.00	7,500 (162)	93
12	28169			<b>5013WW</b>	Aircraft – Warm White	309	A.C.	13W	790	Miniature Pinless	T5	21.00	7,500 (162)	93
13	12775			<b>5113CW</b>	Aircraft – Cool White	309	A.C.	13W	820	Miniature Bi-Pin	T5	21.00	7,500 (162)	94
14	28178			<b>5113WW</b>	Aircraft – Warm White	309	A.C.	13W	790	Miniature Bi-Pin	T5	21.00	7,500 (162)	94

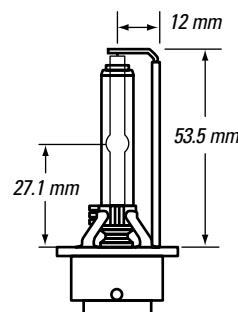
162. Based on three hours of burning per start.

309. See page 50.

\*\* Measured at 100 hours.

\*\*\* Designed and rated for operation in supplementary cathode preheat circuits. Use these lamps with auxiliary equipment specially designed to produce proper electrical values conforming to established specification. For total load, add auxiliary watts to lamp watts.

## CENTRAL DISCHARGE LAMP SPECIFICATION



**Fig. 117**  
T-3

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Atmosphere B-Vac./C-Gas	Filament Designation	Light Center Length (in.)	Max. Overall Length (in.)	Rated Average Lab Life (Hours)	Fig. No.
	Blister Pack	Unit Pack	Bulk Pack													
<b>ELECTRIC DISCHARGE LAMPS – HEADLAMP T-3 BULB <math>\frac{3}{8}</math>" (9.5mm) DIAMETER</b>																
15		16124	<b>D2R*</b>		Auto Low Beam Reflector System <sup>(1)</sup>	308	85	35W	114	P32d-2	C	–	1.06	3.09	1,000 (2)	117
16		15999	<b>D2S*</b>		Auto Low Beam Projector System <sup>(1)</sup>	308	85	35W	254	P32d-2	C	–	1.06	3.09	1,000 (2)	117

1. Special ballast required per ECE R99.

2. B<sub>3</sub> life, not average life.

## NEON GLOW INDICATOR LAMPS

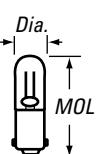


Fig. 96

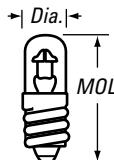


Fig. 97

Line No.	Order Code			GE Lamp No.	Circuit Volts AC or DC	Nom. Watts	Nom. Current	Base	Maximum Overall Length in. (mm)	Average Useful Life (Hours)	Series# Resistance (Ohms)	Footnotes	Fig. No.
	Blister Pack	Unit Pack	Bulk Pack										
<b>T-3½ APPROX. 13/32" (10mm) DIAMETER</b>													
1	12064			B1A (NE-51)	105-125	1/25	.0003A	Miniature Bayonet	1 3/16 (30.2)	15,000	220K	164	96
2	12065			B2A (NE-51H)	105-125	1/7	.0012A	Miniature Bayonet	1 3/16 (30.2)	25,000	47K	164	96
<b>T-4½ APPROX. 9/16" (14mm) DIAMETER</b>													
3	31675			B7A (NE-45)	105-125	1/4	.002A	Candelabra Screw	1 7/32 (38.9)	7,500	30K	164	97

164. Life to approximately 50% of initial output. Values shown apply to use on AC unless otherwise shown. Life on DC is approximately 60% of AC values when DC current is equal to R.M.S. (Root Mean Square) AC value. When equal DC

and R.M.S. AC voltages and equal resistances are utilized, life will be approximately the same.

## FESTOON TYPE, AUTO & SPECIAL SERVICE LAMPS

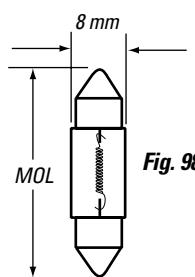


Fig. 98

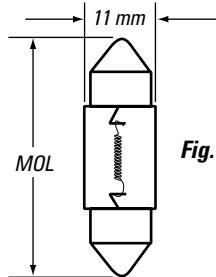


Fig. 99

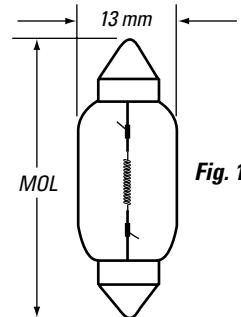
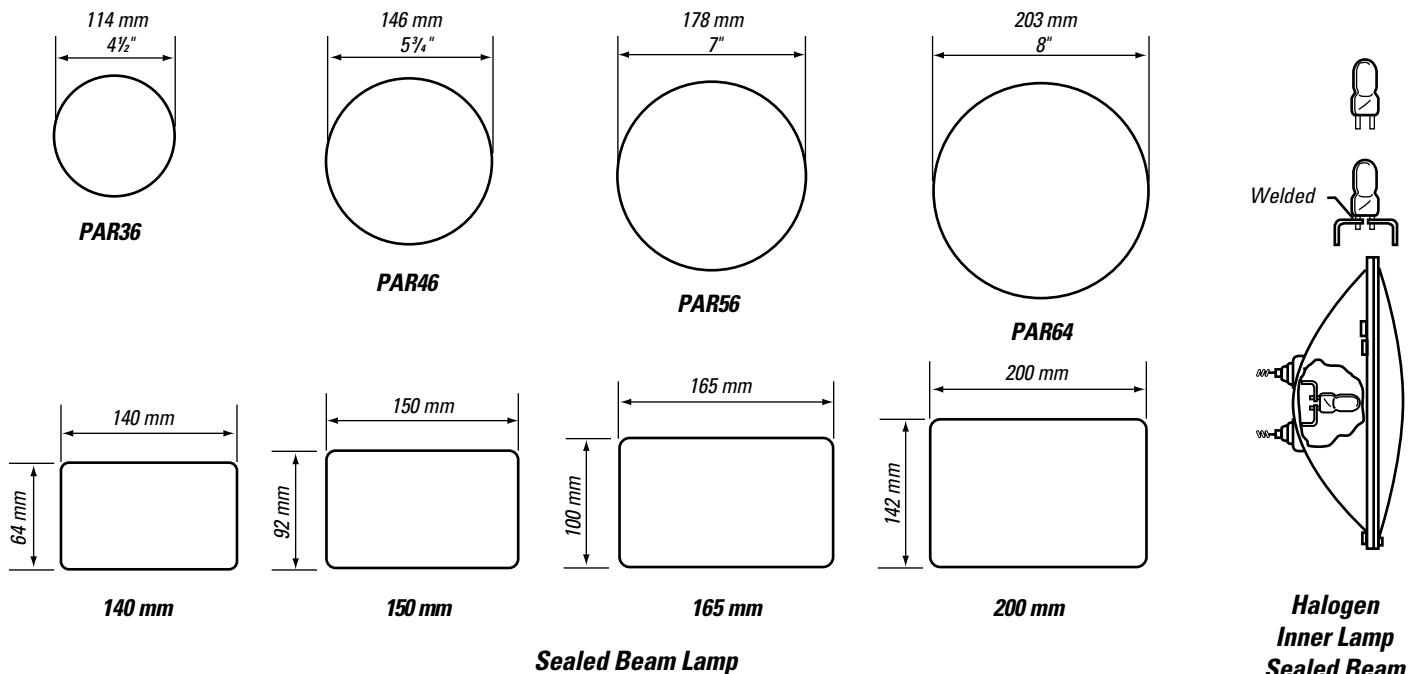


Fig. 100

Line No.	Order Code			GE Lamp No.	Primary Application	Design Volts	Design Watts or Amps	Mean Spherical CP (Approx.)	Base	Base Marking	Atmosphere B-Vac./C-Gas	Max. Overall Length in. (mm)	Rated Average Lab Life (Hours)	Fig. No.	
	Blister Pack	Unit Pack	Bulk Pack												
<b>Festoon Type, Auto &amp; Special Service Lamps</b>															
4	23312	30872	<b>C5W</b>		Auto. ECE C5W	13.5	.37A	3.6	SV8.5/8	12V 5W-C5W	B	1.45	36	450	99
5	25323		<b>DE3021</b>		Dome & Courtesy	14.0	.24A	2	SV7MM	12V 3W	B	1.15	28	1,000	98
6	12353		<b>DE3022</b>		Dome & Courtesy	13.0	.38A	3	SV7MM	12V 5W	B	1.18	29	1,000	98
7	12354	12084	<b>DE3175</b>		Dome & Courtesy	13.0	.77A	9.55	SV8.5MM	12V 10W	B	1.25	31	400	99
8		12085	<b>DE3425</b>		Dome & Courtesy	13.0	.77A	9.55	SV8.5MM	12V 10W	B	1.50	37	400	100
9	23324		<b>DE7576</b>		Strip. Auto DIN 72601K	13.5	.74A	9.8	SV8.5/8	12V 10W	C	1.65	41	200	99

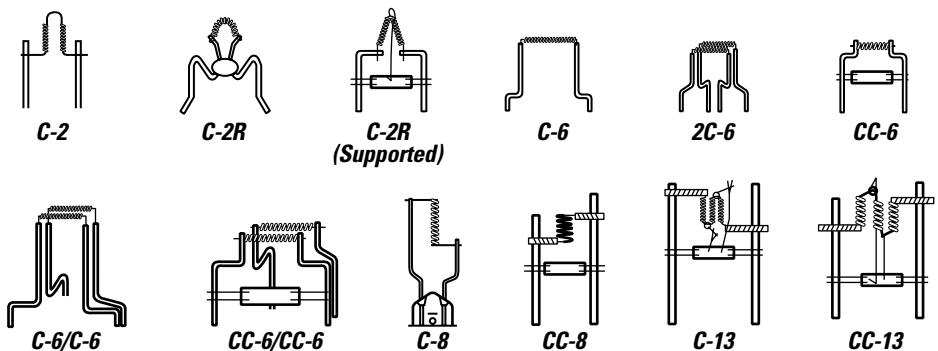
# SEALED BEAM, FILAMENTS & BASES (*Typical*)

## Bulbs



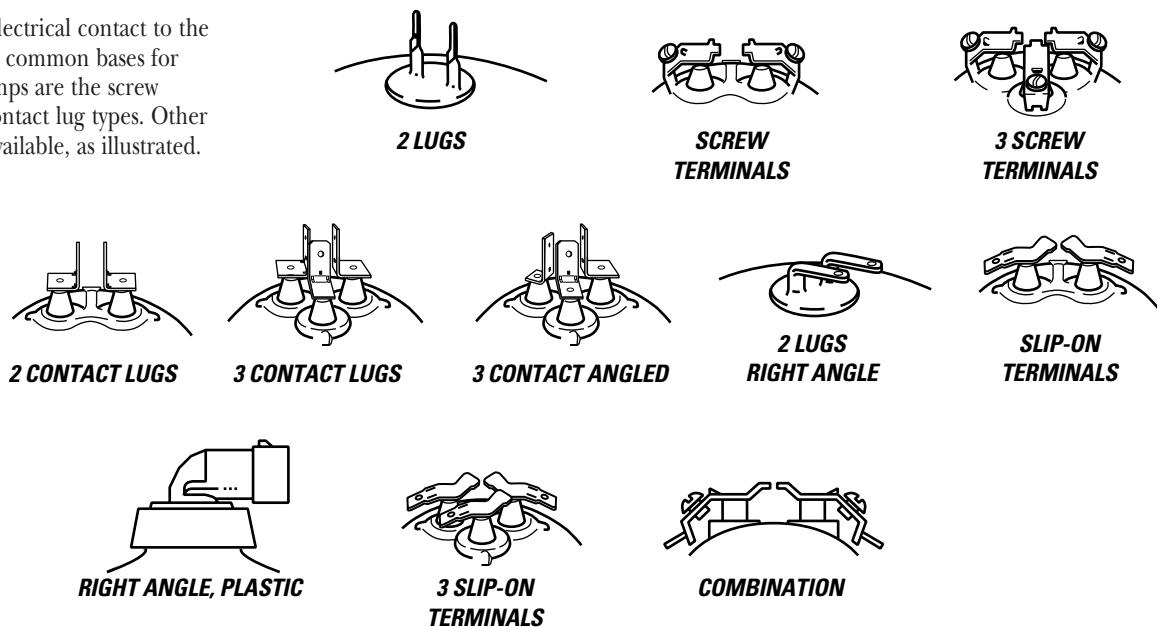
## Filaments

Filaments for sealed beam lamps may be a coil (C) or a coiled coil (CC) wire. Coiling the filament wire reduces gas losses and increases efficiency. The number following the coil identification letter(s) denotes the arrangement of the filament on the supports.



## Bases

Bases provide electrical contact to the lamp. The most common bases for sealed beam lamps are the screw terminal and contact lug types. Other types are also available, as illustrated.



## SEALED BEAM LAMP SPECIFICATIONS

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Approx. Initial Max. Beam C.P.	Approx. Total Spread to 10% Max. C.P. – Degrees	Rated Average Lab Life (Hours)	Base	Filament Designation	Max. Overall Length mm (in.)	
	Blister Pack	Unit Pack	Bulk Pack												
<b>RECTANGULAR 72mm x 140mm (2.8 in x 5.5 in)</b>															
1		18350	H4360	Tractor	307	12.8	37.5W	2,000	Trapezoidal	320	2 Right Angle Lugs	C-6	76	3.00	
2		41453	H5360*	Halogen Tractor Work Light	307	12.8	37.5W	2,000	Trapezoidal	900	2 Right Angle Lugs	C-6	76	3.00	
3	22386		H4351	Auto Headlamp Low Beam Type K	307	12.8	55W		SAE Specifications	500	Right Angle, Plastic	C-8	102	4.00	
4	10211		H4351LH*	Headlamp – Left Hand Drive – Export only	307	12.8	55W		—	500	Right Angle, Plastic	C-8	102	4.00	
5	22387		H4352	Auto Headlamp, Upper Beam Type K	307	12.8	65W		SAE Specifications	150	Right Angle, Plastic	C-8	102	4.00	
<b>RECTANGULAR 92mm x 150mm (3.6 in x 5.9 in)</b>															
6	16484	16483	H9415	Auto, Fog – Halogen	307	12.8	37.5W	12,000	45	5	200 <sup>(4)</sup>	2 Right Angle Lugs	C-6	76	3.00
7	17988		H9415A	Auto Fog Amber	307	12.8	37.5W	—	45	5	200 <sup>(4)</sup>	2 Right Angle Lugs	C-6	76	3.00
8	15767	15763	H9405	Spotlamp, Halogen	307	12.8	50W	100,000	7	4	100	2 Right Angle Lugs	C-6	76	3.00
9	15769	15768	H9406	Tractor, Flood, Halogen	307	12.8	50W	1,350	70	30	400 <sup>(4)</sup>	2 Right Angle Lugs	C-6	76	3.00
10	15771	15770	H9411	Tractor, Trapezoidal, Halogen	307	12.8	50W	5,400	Trapezoidal	400 <sup>(4)</sup>	2 Right Angle Lugs	C-6	76	3.00	
11		15772	H9414	Tractor, Emergency Lighting, Medium Flood, Halogen	307	12.8	50W	2,700	45	20	400 <sup>(4)</sup>	2 Right Angle Lugs	C-6	76	3.00
12	16976	16978	H9420	Auto, Driving – Halogen	307	12.8	50W	47,000	15	5	200 <sup>(4)</sup>	2 Right Angle Lugs	C-6	76	3.00
13	16482		H9421	Auto, Truck, Special Service – Halogen <sup>(109)</sup>	307	12.8	50W	4,000	45	8	200 <sup>(4)</sup>	2 Right Angle Lugs	C-6	76	3.00
14	18538	48534	H4703	Auto Headlamp, Low Beam Type LF	307	12.8	55W		SAE Specifications	320	2 Lugs	C-8	85	3.40	
15	18536	48533	H4701	Auto Headlamp High Beam Type UF	307	12.8	65W		SAE Specifications	150	2 Lugs	C-8	85	3.40	
<b>RECTANGULAR 100mm x 165mm (4.2 in x 6.5 in)</b>															
16	18533	49810	H4656	Auto Headlamp, Low Beam, Type 2A1	HI LO	307	12.8	35W		SAE Specifications	200 <sup>(4)</sup> 320 <sup>(4)</sup>	3 Contact Lugs	C-6 C-6	121	4.80
17	18518		4652	Auto Headlamp, Low Beam, Type 2A1	HI LO	307	12.8	40W		SAE Specifications	200 <sup>(4)</sup> 320 <sup>(4)</sup>	3 Contact Lugs	C-6 C-6	121	4.80
18	14753		H4656HO	Auto Headlamp, Low Beam, Type 2A1. Higher output	HI LO	307	12.8	40W		SAE Specifications	200 <sup>(4)</sup> 700	3 Contact Lugs	C-8 C-8	121	4.80
19	45475		H4656SB*	Auto Headlamp, Low Beam, Type 2A1. Coated for White Light	HI LO	307	12.8	40W		SAE Specifications	75 <sup>(4)</sup> 200	3 Contact Lugs	C-8 C-8	121	4.80
20	19412	19557	H5062	Truck Headlamp, High/Low Beam, Type 2A1. Long Life.	HI LO	307	12.8	40W		SAE Specifications	400 <sup>(4)</sup> 2,000 <sup>(4)</sup>	3 Contact Lugs	C-6 C-6	121	4.80
21	18517	41861	4651	Auto Headlamp, High Beam, Type 1A1	307	12.8	50W		SAE Specifications	200 <sup>(4)</sup>	2 Contact Lugs	C-6	121	4.80	
22	45110	45111	4912-1	Auto/Truck Fog	307	12.8	50W	14,000	40	7	300	Slip-on Terminals	C-6	115	4.53
23	45113		4913-1	Farm Tractor, Flood	307	12.8	50W	1,350	80	20	400 <sup>(4)</sup>	Slip-on Terminals	C-6	115	4.53
24	18532	45027	H4651	Auto Headlamp, High Beam, Type 1A	307	12.8	50W		SAE Specifications	200 <sup>(4)</sup>	2 Contact Lugs	C-6	121	4.80	
25	46375		H4651SB*	Auto Headlamp, High Beam, Type 1A. Coated For White Light	307	12.8	50W		SAE Specifications	200 <sup>(4)</sup>	2 Contact Lugs	C-6	121	4.80	
26	19411	19556	H5051	Truck Headlamp, High Beam, Type 1A. Long Life	307	12.8	50W		SAE Specifications	500 <sup>(4)</sup>	2 Contact Lugs	C-6	121	4.80	
27		13426	H7921-1	Halogen Auto/Truck Special Service <sup>(109)</sup>	307	12.8	50W	23,900	35	5	200 <sup>(4)</sup>	Slip-on Terminals	C-6	115	4.53
28	47460	14892	H7935-1	Halogen Spotlamp	307	12.8	50W	175,000	6.5	3.5	100 150 <sup>(4)</sup>	Slip-on Terminals	C-6 C-8	115	4.53
29	18535	22879	H4666	Auto Headlamp, High/Low Beam, 2E1	HI LO	307	12.8	65W		SAE Specifications	320 <sup>(4)</sup>	3 Contact Lugs <sup>(166)</sup>	C-8 C-8	121	4.80

4. At 14 volts.

166. Contact lugs are angled. See drawing page 43.

109. Special fixture required for highway use.

307. See page 50.

## SEALED BEAM LAMP SPECIFICATIONS

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Approx. Initial Max. Beam C.P.	Approx. Total Spread to 10% Max. C.P. - Degrees	Rated Average Lab Life (Hours)	Base	Filament Designation	Max. Overall Length mm (in.)	
	Blister Pack	Unit Pack	Bulk Pack												
<b>RECTANGULAR 100mm x 165mm (4.2 in x 6.5 in) (continued)</b>															
1		23250	H7913HIR	Farm Tractor, Flood Halogen Infrared	301	12.8	65W	4,000	70	20	800	2 Contact Lugs	C-8	121 4.80	
2	45116	16195	4921-1	Auto/Truck, Special Service <sup>(109)</sup>	307	13.0	100W	25,000	40	7	300	Slip-on Terminals	C-6	115 4.53	
<b>RECTANGULAR 142mm x 200mm (5.6 in x 7.9 in)</b>															
3	18521		6052	Auto Headlamp, Type 2B1	HI LO	307	12.8 12.8	65W 55W	SAE Specifications			150 <sup>(4)</sup> 320 <sup>(4)</sup>	3 Contact Lugs	C-6	138 5.44
4	19429	19558	H5054	Truck Headlamp. High/Low Beam. Type 2B1. Long Life	HI LO	307	12.8 12.8	65W 42W	SAE Specifications			400 <sup>(4)</sup> 2000 <sup>(4)</sup>	3 Contact Lugs	C-6	138 5.44
5	18534	11545	H6054	Auto Headlamp, High/Low Beam, Type 2B1	HI LO	307	12.8 12.8	65W 35W	SAE Specifications			150 <sup>(4)</sup> 320 <sup>(4)</sup>	3 Contact Lugs	C-6	138 5.44
6	14752		H6054HO	Auto Headlamp, High/Low Beam, Type 2B1.	HI LO	307	12.8 12.8	65W 55W	SAE Specifications			150 <sup>(4)</sup> 700 <sup>(4)</sup>	3 Contact Lugs	C-8	138 5.44
7	45477		H6054SB*	Auto Headlamp, High/Low Beam, Type 2B1. Coated for White Light	HI LO	307	12.8 12.8	65W 55W	SAE Specifications			75 <sup>(4)</sup> 200 <sup>(4)</sup>	3 Contact Lugs	C-8	138 5.44
<b>PAR36 BULB 114mm (4½ in) DIAMETER</b>															
8	24780	24783	4546	Hand Lantern			4.7	.5A	6,300	3	3	100	Screw Terminals	C-2R	70 2.75
9	24770	24775	4546-1	Hand Lantern			4.7	.5A	6,300	3	3	100	Slip-on Terminals	C-2R	70 2.75
10	24788		4547	Hand Lantern			4.75	1.25A	20,000	3	3	100	Screw Terminals	C-2R	70 2.75
11	44924	44925	H7556	Halogen Emergency Bldg. Lighting	307	6.0	6W	400	30	20	50	Screw Terminals	C-6	70 2.75	
12	11421	11422	7672-1	Emergency Bldg. Lighting			6.0	7.2W	350	30	20	50	Slip-on Terminals	C-6	70 2.75
13	41865	41866	7613	Emergency Bldg. Lighting			6.0	8W	400	30	20	50	Screw Terminals	C-6	70 2.75
14	45101	45102	7613-1	Emergency Bldg. Lighting			6.0	8W	400	30	20	50	Slip-on Terminals	C-6	70 2.75
15	43561	43562	H7550	Halogen Hand Lantern	307	6.0	8W	25,000	3	3	50	Screw Terminals	C-6	70 2.75	
16		23541	H7550-1	Halogen Hand Lantern	307	6.0	8W	25,000	3	3	50	Slip-on Terminals	C-6	70 2.75	
17	43564	43565	H7551	Halogen Emergency Bldg. Lighting	307	6.0	8W	550	30	20	50	Screw Terminals	C-6	70 2.75	
18	43567		H7552	Halogen Emergency Bldg. Lighting	307	6.0	10W	650	30	20	50	Screw Terminals	C-6	70 2.75	
19	43570	43571	H7553	Halogen Emergency Bldg. Lighting	307	6.0	12W	850	30	20	50	Screw Terminals	C-6	70 2.75	
20		43574	H7554	Halogen Emergency Bldg. Lighting	307	6.0	20W	1,400	30	20	50	Screw Terminals	C-6	70 2.75	
21	24663	24661	4511	Tractor			6.2	30W	2,300	Trapezoidal		300 <sup>(23)</sup>	Screw Terminals	C-6	70 2.75
22	24678		4516	Spotlamp			6.2	30W	45,000	9	4	300	Screw Terminals	C-6	70 2.75
23	39585	39586	4042	Emergency Bldg. Lighting			6.4	12W	1,100	45	20	150	Screw Terminals	C-6	70 2.75
24	24339		4014	Emergency Bldg. Lighting			6.4	18W	1,500	50	25	200	Screw Terminals	C-6	70 2.75
25	24654	24653	4510	Tractor Flood, Emergency Bldg. Lighting			6.4	25W	800	80	20	300	Screw Terminals	C-6	70 2.75
26	24673	24671	4515	Spotlamp			6.4	30W	55,000	5	5	100	Screw Terminals	C-6	70 2.75
27	15133		H4515	Spotlamp, Shielded Bulb	307	6.4	30W	67,000	5.5	4	100	Screw Terminals	C-6	70 2.75	
28	44642	44643	H7555	Halogen Emergency Bldg. Lighting	307	12.0	8W	550	30	20	50	Screw Terminals	C-6	70 2.75	
29	40588	40589	4044	Emergency Bldg. Lighting			12.0	12W	1,100	50	25	150	Screw Terminals	C-6	70 2.75
30	10540	10541	4044-1	Emergency Bldg. Lighting			12.0	12W	1,100	50	25	150	Slip-on Terminals	C-6	70 2.75
31	12720	12721	H7557	Emergency Bldg. Lighting Halogen – Cycle	307	12.0	12W	850	30	20	50	Screw Terminals	C-6	70 2.75	

4. At 14 volts.

301. See page 50.

23. At 7 volts.

307. See page 50.

109. Special fixture required for highway use.

## SEALED BEAM LAMP SPECIFICATIONS

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Approx. Initial Max. Beam C.P.	Approx. Total Spread to 10% Max. C.P. – Degrees		Rated Average Lab Life (Hours)	Base	Filament Designation	Max. Overall Length mm (in.)
	Blister Pack	Unit Pack	Bulk Pack							Horiz.	Vert.				
<b>PAR36 BULB 114mm (4½ in) DIAMETER (continued)</b>															
1	24478	24477	4414		Warning Signal, Emergency Bldg. Lighting, Garden and Security Lighting		12.8	18W	1,500	50	25	300	Screw Terminals	C-6	70 2.75
2	24487		4414R		Turn Signal, Warning Signal Red Lens		12.8	18W	275	50	25	300	Screw Terminals	C-6	70 2.75
3	39987	39988	7414Y		Signal, Light Yellow Lens		12.8	18W	1,000	50	25	300	Screw Terminals	C-6	70 2.75
4	37046	37047	4446		Emergency Bldg. Lighting		12.8	25W	400	80	80	300	Screw Terminals	C-6	70 2.75
5	24425	24423	4405		Spotlight		12.8	30W	50,000	6	5	100	Screw Terminals	C-6	70 2.75
6	22983	24503	4416		Spotlamp, Signal		12.8	30W	35,000	11	4	300	Screw Terminals	C-6	70 2.75
7		34901	4416-1		Spotlamp, Signal		12.8	30W	35,000	11	4	300	Slip-on Terminals	C-6	70 2.75
8	24506		4416A		Signal, Yellow Lens Cover		12.8	30W	26,000	11	4	300	Screw Terminals	C-6	70 2.75
9	24513		4416R		Signal, Red Lens Cover		12.8	30W	4,000	11	4	300	Screw Terminals	C-6	70 2.75
10	15129		H4405		Spotlamp, Shielded Bulb	307	12.8	30W	66,000	7	4	100	Screw Terminals	C-6	70 2.75
11	24430	24428	4406		Tractor, Flood		12.8	35W	600	80	30	300 <sup>(4)</sup>	Screw Terminals	C-6	70 2.75
12	24439		4410		Backup Lamp, Tractor Flood		12.8	35W	600	80	30	300 <sup>(4)</sup>	Screw Terminals	C-6	70 2.75
13	24448	24443	4411		Tractor		12.8	35W	3,000	Trapezoidal		300 <sup>(4)</sup>	Screw Terminals	C-6	70 2.75
14	37889		4411-1		Tractor		12.8	35W	3,000	Trapezoidal		300 <sup>(4)</sup>	Slip-on Terminals	C-6	70 2.75
15	48032		4411-3*		Tractor		12.8	35W	3,000	Trapezoidal		300 <sup>(4)</sup>	Combination	C-6	70 2.75
16	22982		4415		Fog		12.8	35W	9,000	40	5	300	Screw Terminals	C-6	70 2.75
17	24499	24497	4415A		Fog, Yellow Lens		12.8	35W	7,000	40	5	300	Screw Terminals	C-6	70 2.75
18	24542		4422		Tractor		12.8	35W	600	75° Cone		300 <sup>(4)</sup>	Screw Terminals	C-6	70 2.75
19	40190	40191	7400		Signal, Rotating Beacon		12.8	35W	33,000	12	5	300	Slip-on Terminals	C-6	70 2.75
20	42385		7400-1		Signal, Rotating Beacon		12.8	35W	33,000	12	5	300	Screw Terminals	C-6	70 2.75
21	42841	42842	H7600		Halogen Signal, Rotating Beacon	307	12.8	37.5W	60,000	9	4½	300	Screw Terminals	C-6	70 2.75
22	42838	42839	H7616		Halogen Spotlamp	307	12.8	37.5W	70,000	7	4	300	Screw Terminals	C-6	70 2.75
23	39932	39933	4440X		Tractor		12.8	40W	6,000	40	7	320 <sup>(4)</sup>	3 Contact Lugs	C-6	76 3.00
24	39748		4440X-1		Tractor		12.8	40W	4,500	33	9	320 <sup>(4)</sup>		C-6	
25	40176		4460X		Tractor		12.8	40W	6,000	40	7	320 <sup>(4)</sup>	3 Slip-on Terminals	C-6	70 2.75
26		17674	H4460X		Tractor	307	12.8	40W	11,000	22	10	320 <sup>(4)</sup>	3 Screw Terminals	C-6	70 2.75
27		12.8	40W	8,500	22	13	320 <sup>(4)</sup>							C-6	
28	43576	43577	H7604		Halogen Spotlamp	307	12.8	50W	100,000	7	5	100	Screw Terminals	C-6	70 2.75
29	14616	43580	H7606		Tractor, Flood Halogen – Cycle	307	12.8	50W	1,000	80	30	400 <sup>(4)</sup>	Screw Terminals	C-6	70 2.75
30	14618	43586	H7610		Halogen Tractor	307	12.8	50W	5,200	Trapezoidal		400 <sup>(4)</sup>	Screw Terminals	C-6	70 2.75
31	49731	49732	H7614		Halogen Flood	307	12.8	50W	2,000	70	30	100	Screw Terminals	C-6	70 2.75
32	24592		4461		Tractor		12.8	60W	6,000	Trapezoidal		300 <sup>(4)</sup>	Screw Terminals	C-6	70 2.75
33	24596		4466		Tractor		12.8	60W	1,000	80	30	300 <sup>(4)</sup>	Screw Terminals	C-6	70 2.75
34	17672		H7607		Tractor Flood	307	12.8	65W	1,500	Non-Symmetrical		600 <sup>(4)</sup>	Screw Terminals	C-6	70 2.75
35	24650	24649	4509		Aircraft Landing Spotlamp		13.0	100W	110,000	12	6	25	Screw Terminals	C-6	70 2.75
36	41503		4509X		Marine Spotlamp		13.0	100W	110,000	12	6	25	Screw Terminals	C-6	70 2.75
37	11524		4509Y		Special Service		13.0	100W	–	12	6	25	Screw Terminals	C-6	70 2.75
38	24690		4519		Marine		13.0	100W	30,000	40	7	25	Screw Terminals	C-6	70 2.75
39	39906	39907	4700		Spot/Flood		13.0	100W	100,000	12	7	25	3 Screw Terminals	C-6	70 2.75
							13.0	100W	50,000	17	18	25			
40	22109		Q4509		Halogen Quartzline®, Aircraft Landing	301	13.0	100W	140,000	7	7	100	Screw Terminal	C-8	70 2.75

4. At 14 volts.

301. See page 50.

307. See page 50.

## SEALED BEAM LAMP SPECIFICATIONS

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Approx. Initial Max. Beam C.P.	Approx. Total Spread to 10% Max. C.P. – Degrees	Rated Average Lab Life (Hours)	Base	Filament Designation	Max. Overall Length mm (in.)	
	Blister Pack	Unit Pack	Bulk Pack							Horiz.	Vert.				
<b>PAR36 BULB 114mm (4½ in) DIAMETER (continued)</b>															
1	25051		4313	Aircraft Landing	302	13.0	250W	140,000	16	7	25	Screw Terminals	C-6	70	2.75
2	34537		Q4631	Halogen Quartzline®, Aircraft Landing, Wing Inspection	301	13.0	250W	80,000	13	12	500	Screw Terminals	C-6	70	2.75
3	39112		Q4632	Halogen Quartzline® Aircraft Logo	301	13.0	250W	75,000	14	12	500	Screw Terminals	C-6	70	2.75
4	12961		4402A	CIM Signal	28.0	50W	1,000	50	25	400	Screw Terminals	C-6	70	2.75	
5	24627		4502	Auto Headlamp, Military	28.0	50W	10,000	40	7	400	Screw Terminals	C-6	70	2.75	
6	24640	24638	4505	Aircraft Navigation	28.0	50W	45,000	11	5	400	Screw Terminals	CC-6	70	2.75	
7	24873	24871	4589	Aircraft Cockpit Flood, C.I.M. Flood	28.0	50W	5,000	Trapezoidal		400	Screw Terminals	CC-6	70	2.75	
8		23509	4589-1	Aircraft Cockpit Flood, C.I.M. Flood	28.0	50W	5,000	Trapezoidal		400	Slip-on Terminals	CC-6	70	2.75	
9	24887		4593	Aircraft In-Air Refueling	28.0	50W	1,500	80	30	400	Screw Terminals	CC-6	70	2.75	
10	24981	24982	4825R	C.I.M. Stop/Tail Red Lens	28.0	50W	200	-	-	200	3 Screw Terminals	C-2V	70	2.75	
					28.0	18W	40	-	-	200		C-2V			
11	44724		4752	C.I.M. Flood	28.0	60W	2,000	50	25	800	Screw Terminals	2C-6	70	2.75	
12	24882		4591	Aircraft Landing	28.0	100W	90,000	12	6	25	Screw Terminals	CC-6	70	2.75	
13	24891		4594	Aircraft Navigation	28.0	100W	70,000	13	7	300	Screw Terminals	CC-6	70	2.75	
14	24892		4595	Aircraft Navigation	28.0	100W	60,000	14	6	300	Screw Terminals	C-6	70	2.75	
15	24966		4627	Aircraft Flood	28.0	100W	3,000	80	30	300	Screw Terminals	CC-6	70	2.75	
16	24980		4811	Auto Headlamp, Military	28.0	110W	Military/SAE Specifications				400	3 Contact Lugs	CC-6	76	3.00
					28.0	55W					400		CC-6		
17	24964		4626	Aircraft Taxiing	28.0	150W	25,000	40	9	300	Screw Terminals	CC-6	70	2.75	
18	45427		4713	Aircraft Logo	28.0	150W	4,200	50	65	300	Screw Terminals	2C-6	70	2.75	
19	24867		4587	Aircraft Taxiing	302	28.0	250W	40,000	40	13	25	Screw Terminals	CC-8	70	2.75
20	24898		4596	Aircraft Landing	302	28.0	250W	150,000	11	12	25	Screw Terminals	CC-8	70	2.75
21	39362	39363	4350	Electric Truck Work Light <sup>(15)</sup>	36.0	60W	2,100	Trapezoidal		400	Slip-on Terminals	C-2V	70	2.75	
22	39366	39367	4340	Electric Truck Work Light <sup>(15)</sup>	48.0	80W	2,500	Trapezoidal		400	Slip-on Terminals	C-2V	70	2.75	
<b>PAR46 BULB 146mm (5¾ in) DIAMETER</b>															
23	24369		4019	Tractor	6.2	30W	1,200	Trapezoidal		300 <sup>(23)</sup>	Screw Terminals	C-6	95	3.75	
24	24327		4013	Tractor, Flood	6.4	25W	800	80	20	300	Screw Terminals	C-6	95	3.75	
25	24735	24733	4535	Spotlamp	6.4	30W	95,000	5½	4	100	Screw Terminals	C-6	95	3.75	
26	24726		4531	Auto Headlamp, Military	12.5	40W	30,000	20	5	400	Screw Terminals	C-6	95	3.75	
27	24577	24576	4435	Spotlamp	12.8	30W	75,000	5	5	100	Screw Terminals	C-6	95	3.75	
28	24454	24453	4412	Fog	12.8	35W	11,000	40	7	300	Screw Terminals	C-6	95	3.75	
29	24460	24459	4412A	Fog, Yellow	12.8	35W	8,800	40	7	300	Screw Terminals	C-6	95	3.75	
30	22981	24464	4413	Tractor, Flood	12.8	35W	1,100	80	20	300 <sup>(4)</sup>	Screw Terminals	C-6	95	3.75	
31	24531	24525	4419	Tractor	12.8	35W	1,600	Trapezoidal		300 <sup>(4)</sup>	Screw Terminals	C-6	95	3.75	
32	24582		4436	Signal	12.8	35W	60,000	10	4	300	Screw Terminals	C-6	95	3.75	
33	18523		H5006	Auto Headlamp, Low Beam HI	307	12.8	35W	SAE Specifications		200 <sup>(4)</sup>	3 Contact Lugs	C-6	102	4.00	
				Type 2C1 LO	12.8	35W				320 <sup>(4)</sup>		C-6			
34	18511		4000	Auto Headlamp, Low Beam HI	12.8	37.5W	SAE Specifications			200 <sup>(4)</sup>	3 Contact Lugs	C-6	102	4.00	
				Type 2C1 LO	12.8	60W				320 <sup>(4)</sup>		C-6			
35	18516	24231	4001	Auto Headlamp, High Beam	12.8	37.5W	SAE Specifications			300 <sup>(4)</sup>	2 Contact Lugs	C-6	102	4.00	
				Type 1C1											
36	38418		4040	Truck Headlamp, Low Beam HI	12.8	37.5W	SAE Specifications			300 <sup>(4)</sup>	3 Contact Lugs	C-6	102	4.00	
				Heavy Duty, Type 2C1 LO	12.8	60W				500 <sup>(4)</sup>		C-6			
37	49695		H7612	Halogen Fog	307	12.8	37.5W	15,000	40	7	450	Screw Terminals	C-6	95	3.75
38	24572		4434A	School Bus Signal, Amber Lens	12.8	40W	1,000	55	25	100	Screw Terminals	C-6	95	3.75	

4. At 14 volts.

301. See page 50.

15. This lamp is specially designed for a particular purchaser and may not be suitable for other uses because of its limited mechanical strength.

302. See page 50.

23. At 7 volts.

307. See page 50.

## SEALED BEAM LAMP SPECIFICATIONS

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Approx. Initial Max. Beam C.P.	Approx. Total Spread to 10% Max. C.P. – Degrees	Rated Average Lab Life (Hours)	Base	Filament Designation	Max. Overall Length mm (in.)
	Blister Pack	Unit Pack	Bulk Pack							Horiz.	Vert.			
<b>PAR46 BULB 146mm (5 3/4 in) DIAMETER (continued)</b>														
1	11639		5001*	Auto Headlamp, High Beam Type 1C1			12.8	50W		SAE Specifications	300 <sup>(4)</sup>	2 Contact Lugs	C-6	102 4.00
2	18522		H5001	Auto Headlamp High Beam, Type 1C1	307	12.8	50W			SAE Specifications	200 <sup>(4)</sup>	2 Contact Lugs	C-6	102 4.00
3	14617	43583	H7609	Halogen Tractor Flood	307	12.8	50W	2,200	80	20	400 <sup>(4)</sup>	Screw Terminals	C-6	95 3.75
4	14619	43589	H7619	Halogen Tractor	307	12.8	50W	6,000		Trapezoidal	400 <sup>(4)</sup>	Screw Terminals	C-6	95 3.75
5		45058	H7621-1	Halogen Auto/Truck Special Service <sup>(109)</sup>	307	12.8	50W	20,000	50	7	200 <sup>(4)</sup>	Slip-on Terminals	C-6	95 3.75
6	43591	43592	H7635	Halogen Spotlamp	307	12.8	50W	160,000	6 1/2	4	100	Screw Terminals	C-6	95 3.75
7		18022	H7635X	Halogen Spotlamp	307	12.8	50W	160,000	6 1/2	4	100	Screw Terminals	C-6	95 3.75
8	24613		4478	C.I.M. Flood		13.0	60W	1,600	56	32	800 <sup>(4)</sup>	2 Contact Lugs	2C-6	102 4.00
9	17894	17890	H7680HIR	Halogen Infrared Spotlamp	301	13.0	80W	275,000	6 1/2	6 1/2	100	Screw Terminals	C-8	95 3.75
10	26694	26695	H7680X	Halogen Infrared-Spotlamp Long Life	301	13.0	80W	230,000	6 1/2	6 1/2	300	Screw Terminals	C-8	95 3.75
11	24539	24541	4421	Auto/Truck, Special Service <sup>(109)</sup>		13.0	100W	23,000	50	7	300	Slip-on Terminals	C-6	95 3.75
12	24742		4537	Aircraft Landing		13.0	100W	200,000	11	6	25	Screw Terminals	C-6	80 3.13
13	40822	40823	4537-2	Spotlamp		13.0	100W	200,000	11	6	25	Screw Terminals	C-6	80 3.13
14	39022		4537X	Marine Spotlamp		13.0	100W	200,000	11	6	25	Screw Terminals	C-6	80 3.13
15	24700		4522	Aircraft Landing		13.0	250W	290,000	12	10	25 <sup>(138)</sup>	Screw Terminals	C-2 <sup>(92)</sup>	80 3.13
16	19632	16407	4636-3	Signal		14.0	80W	90,000	9	7 1/2	200	Combination	2C-6	95 3.75
17	33284		4635	Aircraft Landing	302	16.5	450W	325,000	14	15	25	Screw Terminals	C-8	95 3.75
18	24721		4530	Signal, Flashing		26.0	5.3A	100,000	11	11	50	Screw Terminals	4CC-8	95 3.75
19	25005	25007	4578	C.I.M. Flood		28.0	60W	1,600	55	30	800	2 Contact Lugs	2C-6	102 4.00
20	24995		4880	C.I.M. Headlamp		28.0	60W	6,000	-	-	800	2 Contact Lugs	2C-6	102 4.00
21	25009	25011	4579	C.I.M. Headlamp		28.0	80W	24,000	25	25	400	3 Contact Lugs	CC-6	102 4.00
						28.0	60W	11,000	7	7	400		CC-6	
22	24828		4570	Aircraft Taxiing		28.0	150W	32,000	50	9	300	Screw Terminals	CC-6	95 3.75
23	24830		4571	Flood, Special Service		28.0	150W	7,000	80	25	300	Screw Terminals	CC-6	95 3.75
24	24833		4572	Auto Flood, Military		28.0	150W	4,500	55	55	300	Screw Terminals	CC-6	95 3.75
25	19628		4532	Aircraft		28.0	250W	75,000	12	19	100	Screw Terminals	CC8	95 3.75
						28.0	150W	14,500	16	19	100		C2V	
26	24795		4551	Aircraft Taxiing		28.0	250W	75,000	50	10	25 <sup>(138)</sup>	Screw Terminals	CC-6	95 3.75
27	24799		4553	Aircraft Landing		28.0	250W	300,000	11	12	25 <sup>(138)</sup>	Screw Terminals	CC-8	80 3.13
28	41452		Q5551*	Halogen Quartzline®, Aircraft Taxiing	301	28.0	250W	60,000	48	12	100	Screw Terminals	CC-6	84 3.32
29	24802		4554	Aircraft Taxiing	302	28.0	450W	90,000	50	16	25	Screw Terminals	CC-8	80 3.13
30	24859		4580	Aircraft Landing	302	28.0	450W	400,000	13	14	10	Screw Terminals	CC-8	95 3.75
31	24862		4581	Aircraft Landing	302	28.0	450W	400,000	13	14	10	Screw Terminals	CC-8	80 3.13
32	24853		4582	Aircraft/Helicopter Flood	302	28.0	450W	20,000	50	55	10	Screw Terminals	CC-8	95 3.75
33	37706		Q4554	Halogen Quartzline®, Aircraft Taxiing	301	28.0	450W	65,000	50	11	100	Screw Terminals	CC-6	67 2.63
34	41097		Q4566	Halogen Quartzline®, Aircraft Logo Light	301	28.0	450W	150,000	16	12	1,000	Screw Terminals	CC-6	84 3.32
35	37372		Q4597	Halogen Quartzline®, Aircraft Flood	301	28.0	450W	16,000	60	35	1,000	Screw Terminals	CC-6	84 3.32
36	36271		Q4681	Halogen Quartzline®, Aircraft Landing	301	28.0	450W	310,000	15	9	50	Screw Terminals	CC-6	67 2.63

4. At 14 volts.

301. See page 50.

92. Filament segments parallel.

302. See page 50.

109. Special fixture required for highway use.

307. See page 50.

138. Life Test Conditions: Cycled 5 minutes on, 5 off.

## SEALED BEAM LAMP SPECIFICATIONS

Line No.	Order Code			GE Lamp No.	Primary Application	Safety Notes	Design Volts	Design Watts or Amps	Approx. Initial Max. Beam C.P.	Approx. Total Spread to 10% Max. C.P. - Degrees		Rated Average Lab Life (Hours)	Base	Filament Designation	Max. Overall Length mm (in.)	
	Blister Pack	Unit Pack	Bulk Pack							Horiz.	Vert.					
<b>PAR56 BULB 178mm (7 in) DIAMETER</b>																
1	25114			<b>6006</b>	Auto Headlamp	HI LO	6.1 6.2	50W 40W		SAE Specifications		300 500	3 Contact Lugs	C-6 C-6	127 5.00	
2	24768			<b>4545</b>	Marine Searchlight		12.0	100W	225,000	9	5	100	Screw Terminals	C-6	114 4.50	
3	24764			<b>4543</b>	Marine Spotlamp		12.5	100W	250,000	9	5	50	Screw Terminals	C-6	114 4.50	
4	38416	38607		<b>6015</b>	Auto/Truck Headlamp, Heavy Duty, Type 2D1	HI LO	12.8	50W 50W		SAE Specifications		300 <sup>(4)</sup> 500 <sup>(4)</sup>	3 Contact Lugs	C-6 C-6	127 5.00	
5	18519			<b>6014</b>	Auto Headlamp, Type 2D1	HI LO	12.8 12.8	60W 50W		SAE Specifications		320 <sup>(4)</sup> 150 <sup>(4)</sup>	3 Contact Lugs	C-6 C-6	127 5.00	
6	19428	19559		<b>H5024</b>	Truck Headlamp. High/Low Beam. Type 2D1. Long Life	HI LO	307	12.8 12.8	65W 42W		SAE Specifications		400 <sup>(4)</sup> 2000 <sup>(4)</sup>	3 Contact Lugs	C-6 C-6	127 5.00
7	18525			<b>H6024</b>	Auto Headlamp, High/Low Beam, Type 2D1	HI LO	307	12.8 12.8	65W 35W		SAE Specifications		150 <sup>(4)</sup> 320 <sup>(4)</sup>	3 Contact Lugs	C-6	127 5.00
8	25153			<b>6045</b>	Signal		26.0	170W	230,000	9	8	100	Screw Terminals	CC-6	114 4.50	
9	24973			<b>4800</b>	Auto Headlamp, Military		28.0	50W		Military/SAE Specifications		400	3 Contact Lugs	CC-6	127 5.00	
10	24756			<b>4541</b>	Aircraft Landing		302	28.0	450W	470,000	15	11	25	Screw Terminals	C-13	114 4.50
<b>PAR64 BULB 203MM (8 in) DIAMETER</b>																
11	40576			<b>4552</b>	Aircraft Landing		28.0	250W	500,000	7	8	25 <sup>(138)</sup>	Screw Terminals	CC-8	95 3.75	
12	40578			<b>4559</b>	Aircraft Landing		28.0	600W	600,000	11	12	25 <sup>(138)</sup>	Screw Terminals	CC-8	95 3.75	
13	40579			<b>Q4559</b>	Halogen Quartzline®, Aircraft Landing	301	28.0	600W	600,000	12	8	100 <sup>(138)</sup>	Screw Terminals	CC-6	95 3.75	
14	42552			<b>Q4559X</b>	Halogen Quartzline®, Aircraft Landing	301	28.0	600W	765,000	11	7½	100 <sup>(138)</sup>	Screw Terminals	CC-6	95 3.75	
15	40577			<b>Q4629</b>	Halogen Quartzline®, Aircraft Logo Light	301	28.0	600W	20,000	55	35	1000	Screw Terminals	CC-6	122 4.81	
16	16784			<b>Q5559*</b>	Halogen Quartzline®, Aircraft Landing	301	28.0	600W	650,000	11	7½	200 <sup>(138)</sup>	Screw Terminals	CC-6	95 3.75	
17	40581			<b>4557</b>	Aircraft Landing/Taxiing	302	28.0	1,000W	540,000	11	15	25	3 Screw Terminals	CC-8	95 3.75	
18	16152			<b>5557</b>	Aircraft Landing/Taxiing	302	28.0	400W	100,000	25	11	100 <sup>(138)</sup>	3 Screw Terminals	CC-8	95 3.75	
19	40583			<b>4555</b>	Aircraft Landing	302	28.0	1,000W	540,000	11	15	50	3 Screw Terminals	C-6	95 3.75	
20	40583						115.0	1,000W	600,000	20	11	25 <sup>(138)</sup>	Screw Terminals	C-13	95 3.75	

4. At 14 volts.

138. Life Test Conditions: Cycled 5 minutes on, 5 off.

139. Life Test Conditions: Cycled 20 minutes on, 20 off.

301. See page 50.

302. See page 50.

307. See page 50.

# SAFETY NOTES

301

## ⚠ WARNING

### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

### Pressurized lamp—unexpected rupture may cause injury, fire, or property damage

- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken

## ⚠ CAUTION

### Risk of burn

- Allow lamp/fixtures to cool before handling

### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container

302

## ⚠ WARNING

### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

### Unexpected lamp rupture may cause injury, fire, or property damage

- Avoid contact with glass during operation
- Avoid direct water/liquid contact
- Use in enclosed fixture rated for this product

303

## ⚠ WARNING

### Lamp may shatter if used in wrong circuit

- Do not use in 110-120 Volt household circuit

304

## ⚠ WARNING

### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

### Lamp emits UV radiation which may cause eye/skin injury

- Avoid exposure of eyes and skin to unshielded lamp

### Pressurized lamp—unexpected rupture may cause injury, fire, or property damage

- Use eye protection when handling lamp
- Do not exceed rated voltage
- Do not touch glass with bare hands
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not turn on lamp until fully installed
- Keep away from children
- Use protective screen when handling

## ⚠ CAUTION

### Risk of burn

- Allow lamp/fixtures to cool before handling

### FOR BEST PERFORMANCE

- Limit seal temperature to 350°C
- Maintain 250°C minimum bulb wall temperature
- Remove fingerprints from bulb with grease-free solvent
- Operate at design voltage

305

## ⚠ CAUTION

### Lamp may shatter and cause injury if broken

- Do not use excessive force when installing lamp

306

## ⚠ WARNING

### Pressurized lamp—unexpected rupture may cause injury, fire, or property damage

- Use eye protection when handling lamp
- Do not exceed rated voltage
- Avoid direct water/liquid contact
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not turn on lamp until fully installed
- Keep away from children
- Use protective screen when handling

## ⚠ CAUTION

### Risk of burn

- Allow lamp/fixtures to cool before handling

307

## ⚠ WARNING

### Pressurized lamp—unexpected rupture may cause injury, fire, or property damage

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container

308

## ⚠ WARNING

### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

### Pressurized lamp—unexpected rupture may cause injury, fire, or property damage

- Use eye protection when handling lamp
- Do not exceed rated voltage
- Do not touch glass with bare hands
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not turn on lamp until fully installed
- Keep away from children
- Use protective screen when handling

## ⚠ CAUTION

### Risk of burn

- Allow lamp/fixtures to cool before handling

### FOR BEST PERFORMANCE

- Limit seal temperature to 350°C
- Maintain 250°C minimum bulb wall temperature
- Remove fingerprints from bulb with grease-free solvent
- Operate at design voltage

309

## ⚠ WARNING

### Risk of electric shock

- Turn power off before inspection, installation or removal

## ⚠ CAUTION

### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use excessive force when installing lamp

# INFORMATION ON GE LAMPS – WORLDWIDE – IS AVAILABLE AT THE FOLLOWING LOCATIONS

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<b>AUSTRALIA</b>	GE Lighting Australia Ltd. 125-127 Long Street Smithfield, NSW 2164	Tel: (61) 2 9729 0011 Fax: (61) 2 9729 1144	<b>JAPAN</b>	GE Consumer Products Japan Ltd. 2nd Fl., Kowa 16 Building, South Wing, 9-20, Akasaka 1-chome Minato-ku, Tokyo 107-0052	Tel: (81) 3 5296 2960 Fax: (81) 3 5296 1500
<b>AUSTRIA</b>	GE Lighting GmbH Praunheimer Landstr. 50 6048 Frankfurt GERMANY	Tel: (49) 69 768 010 Fax: (49) 69 768 01 430	<b>KAZAKHSTAN</b>	GE Lighting Rep. Office Prime Business Centre 100, G.ul.Furmanova, 2nd Floor 480091 Almaty	Tel: (7) 3272 509 833, (7) 3272 509 834 Fax: (7) 3272 507 851
<b>BAHRAIN, EGYPT, JORDAN, KUWAIT, OMAN, QATAR, SAUDI ARABIA, UAE, &amp; YEMEN</b>	GE International Operations Co.. 54 Lebanon Street, Mohandessin Giza EGYPT	Tel: (20) 2 301 8060 or 8065 Fax: (20) 2 303 1082	<b>KOREA</b>	GE Samsung Lighting Co.Ltd. 3rd Floor Shinjungang B/D 646-9 Yokksam-Dong, Kangnam-Gu Seoul, Korea 135-911	Tel: (82) 2 569-4181 Fax: (82) 2 563-9933
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