

- 0.3 INCH (7.62mm) DIGIT HEIGHT.
- CONTINUOUS UNIFORM SEGMENTS.
- ◆ CHOICE OF SIX BRIGHT COLORS RED/BRIGHT RED/GREEN/YELLOW/ORANGE/HIGH EFFI-CIENCY RED.
- LOW POWER REQUIREMENT.
- EXCELLENT CHARACTERS APPEARANCE.
- HIGH CONTRAST.
- HIGH BRIGHTNESS.
- WIDE VEIWING ANGLE.
- SOLID STATE RELIABILITY.
- CATEGORIZED FOR LUMINOUS INTENSITY.
- I.C. COMPATIBLE.
- EASY MOUNTING ON P.C. BOARD OR SOCKETS.

DESCRIPTION

The LTC-3710 series devices are 0.3 inch (7,62mm) height four digit displays.

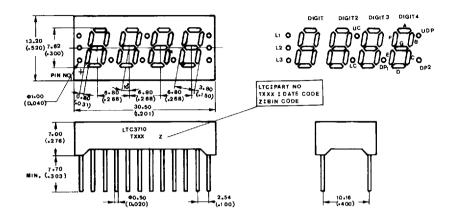
The red series devices utilize LED chips which are made from GaAsP on a GaAs substrate. The bright red and green series devices utilize LED chips which are made from GaP on a transparent GaP substrate. The yellow, orange and high efficiency red series devices utilize LED chips which are made from GaAsP on a transparent GaP substrate. Red and bright red displays have black face and red segment color. Green, and orange displays have black face and white segment color, Yellow displays have black face and yellow segment color. High efficiency red displays have red face and red segment color.

DEVICES

		PART	NO. LTC-			
RED	BRIGHT RED	GREEN	YELLOW	ORANGE	HIEFF. RED	DESCRIPTION
3710R	371,0P	3710G	3710Y	3710E	3710HR	Multiplex, Common Cathode
3718R	3718P	3718G	3718Y	3718E	3718HR	Multiplex, Common Cathode

PACKAGE DIMENSIONS

A. LTC-3710 Series



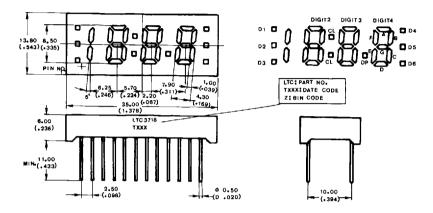
NOTE: All dimensions are in $\frac{millimeters}{\text{(inches)}}$ tolerance are: +1.00 -0.00 1. Lead length (from setting plane) MINIMUM VALUM $(\frac{+0.040^{\text{n}}}{-0.000^{\text{n}}})$

±0.25mm unless otherwise noted. (0.010ⁿ)

CONNECTION	PIN NO.	CONNECTION
Anode L3	13	Cathode U.D.P.
Common Cathode Digit 1	14	Cathode D.P. 2.
Anode D. Digit 1, 2, 3, 4	18	Anode U.D.P.
Anode L2	16	Cethode D.P.I.
Common Cathode, Digit 2	17	Anode A, Digit 1, 2, 3, 4
Cathode UC, LC	18	Anode F, Digit 1', 2, 3, 4'
Anode UC, LC	19	Anode B, Digit 1, 2, 3, 4
Cammon Cathode, Digit 3	20	Anode C, Digit 1, 2, 3, 4
Anode D.P.I.	21	Anode E, Digit 1
Common Cathode, Digit 4	22	Anode G, Digit 1, 2, 3, 4
Anode E, Digit 2, 3, 4	23	Anode L1
Anode D.P.2	24	Cathode L1, L2, L3
	Anode L3 Common Cathode Digit 1 Anode D, Digit 1, 2, 3, 4 Anode L2 Common Cathode, Digit 2 Cathode UC, LC Anode UC, LC Common Cathode, Digit 3 Anode D,P.I. Common Cathode, Digit 4 Anode E, Digit 2, 3, 4	Anode L3 Common Cathode Digit 1 Anode D. Digit 1, 2, 3, 4 Anode L2 16 Common Cathode, Digit 2 17 Cathode UC, LC 18 Anode UC, LC 19 Cammon Cathode, Digit 3 20 Anode D.P.1: Common Cathode, Digit 4 22 Anode E, Digit 2, 3, 4 23

PACKAGE DIMENSIONS

B. LTC-3718 Series



NOTE: All dimensions are in millimeters tolerance are:

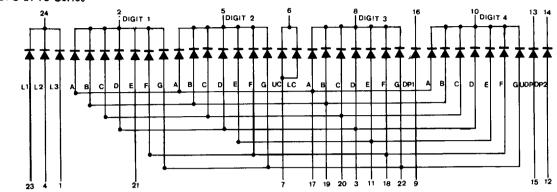
1. Lead length (from setting plane). MINIMUM VALUM

+1.00 -0.00 (\frac{+0.040''}{-0.000''})

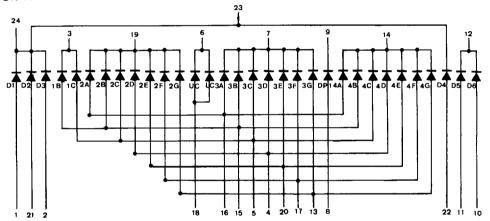
± 0.25 mm unless otherwise noted.

PIN NO.	CONNECTION	PIN NO.	CONNECTION
1	ANODE D1	13	ANODE G
2	ANODE D3	14	COMMON CATHODE DIGIT 4
3	COMMON CATHODE DIGIT	15	ANODE B
4	ANODE D	16	ANODE A
5	ANODE 3	17	ANODEF
6	CATHODE UC, LC	18	ANODE UC, LC
<i>7</i>	COMMON CATHODE DIGIT 3	19	COMMON CATHODE DIGIT 2
8	ANODE D.P.	20	ANODEE
9	CATHODE D.P.	21	ANODE D2
10	ANODE D6	22	ANODE 4
11.	ANODE D5	23	CATHODE D2, D4
12	CATHODE 05, D6	24	CATHODE D1, D3

LTC-3710 Series



LTC-3718 Series



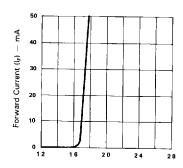
ABSOLUTE MAXIMUM RATINGS

RED	BRIGHT RED	GREEN	YELLOW	ORANGE	HI,-EFF. RED	UNIT
45	30	60	50	60	60 ,	mW
120	40	80	60	80	80	mA
20	12	- 20 20	16	20	20 `	mA
0.24	0.14	0.24	0,2	0.24	0,24	mA/°C
5	5	5	5	5	5	٧
			-25°C to + 8	35°C		
			-25°C to +8	5°C		
	45 120 20 0.24	45 30 120 40 20 12 0.24 0.14	RED GREEN 45 30 60 120 40 80 20 12 20 20 0.24 0.14 0.24 5 5 5	RED RED SREEN VELLOW 45 30 60 50 120 40 80 60 20 12 20 20 16 0.24 0.14 0.24 0.2 5 5 5 5 -25°C to +8	RED GREEN VELLOW DRANGE 45 30 60 50 60 120 40 80 60 80 20 12 20 20 16 20 0.24 0.14 0.24 0.2 0.24	RED GREEN FELLOW ORANGE RED 45 30 60 50 60 60 120 40 80 60 80 80 20 12 20 20 16 20 20 0.24 0.14 0.24 0.2 0.24 0.24 5 5 5 5 5 5 -25°C to + 85°C

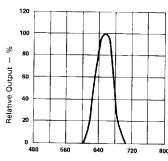
ELECTRICAL/OPTICAL CHARACTERISTICS AT TA = 25°C LTC-3710R

PARAMETER	SYMBOL	MIN,	тур.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	in the A	200	450		µ cd	if = 10 mA
Peak Emission Wavelength	λр		655		nm	IF = 20 mA
Spectral Line Half-Width	Δλ		24		nm.	IF = 20 mA
Forward Voltage any Segment or D.P.	VF.		1.7	2.0	V	IF = 20 mA
Reverse Current, any Segment or D.P.	A TRACE			100	μA	Va = 5 V
Luminous Intensity Matching Ratio	iv-m			2:1		IF = 20 mA

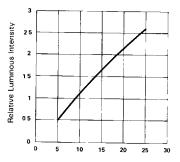
TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES



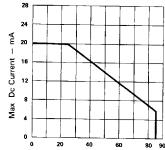
Forward Voltage (V_F) - Volts Fig 1 FORWARD CURRENT Vs FORWARD VOLTAGE



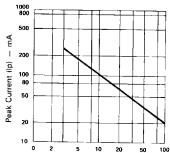
Wavelength (λ) — nm Fig 2 SPECTRAL RESPONSE



Forward Current (IF) - mA Fig. 3 RELATIVE, LUMINOUS INTENSITY Vs FORWARD CURRENT (PER SEGMENT)



Ambient Temperature (Ta) - °C Vs AMBIENT TEMPERATURE



Duty Cycle % (REFRESH RATE - F = 1 KHz)

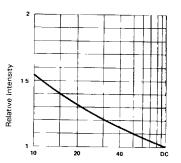


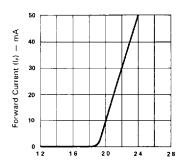
Fig 4 MAX ALLOWABLE DC CURRENT PER SEG Fig 5 MAX PEAK CURRENT Vs DUTY CYCLE % Fig 6 LUMINOUS INTENSITY Vs DUTY CYCLE% (AVERAGE IF = 10mA PER SEG.)

ELECTRICAL/OPTICAL CHARACTERISTICS AT TA = 25°C LTC-3710P

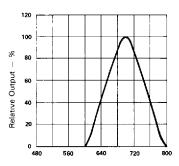
PARAMETER	SYMBOL	MIN.	TYP,	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	x	250	600	· · · · · · · · · · · · · · · · · · ·	μcd	IF = 10 mA
Peak Emission Wavelength	λp		697		nm	IF = 20 mA ◌ੈ
Spectral Line Half-Width	άλ		90		nm	IF = 20 mA
Forward Voltage any Segment or D.P.	VF		2,1	2.8	٧	IF = 20 mA
Reverse Current, any Segment or D.P.	İB	, ,		100	μΑ	VR = 5 V
Luminous Intensity Metching Ratio	lym			2:1.		IF = 20 mA

TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES

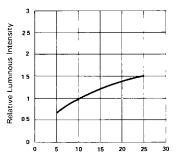
(25° C Ambient Temperature Unless Otherwise Noted)



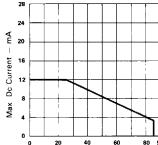
Forward Voltage (V_F) - Volts Fig 1 FORWARD CURRENT Vs FORWARD VOLTAGE



Wavelength (λ) - nm Fig 2 SPECTRAL RESPONSE

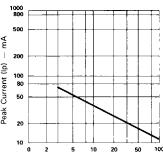


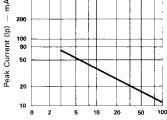
Forward Current (I_F) - mA Fig. 3 RELATIVE, LUMINOUS INTENSITY Vs. FORWARD CURRENT (PER SEGMENT)

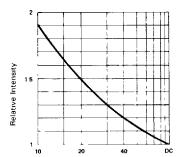


Vs AMBIENT TEMPERATURE

80 90 Ambient Temperature (Ta) - °C





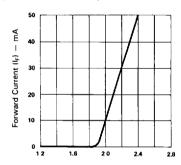


Duty Cycle % Duty Cycle % Fig 4 MAX ALLOWABLE DC CURRENT PER SEG Fig 5 MAX PEAK CURRENT Vs DUTY CYCLE % Fig 6 LUMINOUS INTENSITY Vs DUTY CYCLE% (AVERAGE I_F = 10mA PER SEG) (REFRESH RATE F = 1 KHz)

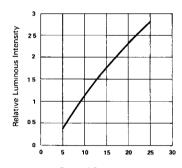
ELECTRICAL/OPTICAL CHARACTERISTICS AT TA = 25°C LTC-3710G

PARAMETER	SYMBOL	MN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	ly 🔭	750	1800		μcd	IF = 10 mA
Peak Emission Wavelength	λp	,	565		nm	IF = 20 mA
Spectral Line Half-Width	_Δλ		30		nm	IF = 20 mA
Forward Voltage any Segment or D.P.	VF :	,	2.1	2.8	, v	IF = 20 mA
Reverse Current, any Segment or D.P.	ln .		- / /	100	μА	Vn = 5 V
Luminous Intensity Metching Ratio	lv-m			2:1		IF = 20 mA

TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES



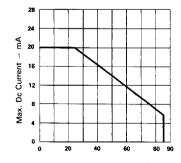
100 Relative Output 60 40 20 480

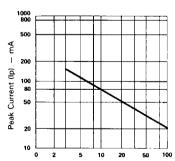


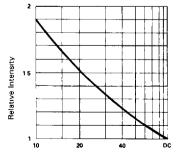
Forward Voltage (V_F) - Volts Fig. 1 FORWARD CURRENT Vs. FORWARD VOLTAGE.

Wavelength $\langle \lambda \rangle$ - nm Fig 2 SPECTRAL RESPONSE

Forward Current (I_F) - mA Fig 3 RELATIVE, LUMINOUS INTENSITY Vs FORWARD CURRENT (PER SEGMENT)







Ambient Temperature (Ta) - °C Vs AMBIENT TEMPERATURE

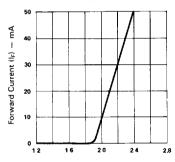
Duty Cycle % (REFRESH RATE F = 1 KHz)

Duty Cycle % Fig 4 MAX ALLOWABLE DC CURRENT PER SEG Fig 5 MAX PEAK CURRENT Vs DUTY CYCLE % Fig 6 LUMINOUS INTENSITY Vs DUTY CYCLE% (AVERAGE I_F = 10mA PER SEG)

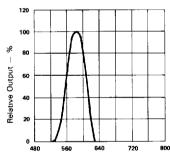
ELECTRICAL/OPTICAL CHARACTERISTICS AT TA = 25°C LTC-3710Y

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	lv	600	1300		μed	tr = 10 mA
Peak Emission Wavelength	λρ		585		nm	IF = 20 mA
Spectral Line Half-Width	Δλ		35		nm	IF = 20 mA
Forward Voltage any Segment or D.P.	VF		2.1	2.8	V	IF = 20 mA
Reverse Current, any Segment or D.P.	IR			100	μА	VR = 5 V
Luminous Intensity Matching Ratio	(v-m			2:1		IF = 20 mA

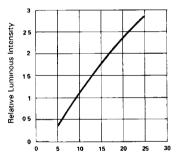
TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES



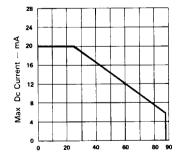
Forward Voltage (V_{F}) — Volts Fig 1 FORWARD CURRENT Vs. FORWARD VOLTAGE



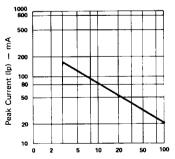
Wavelength (λ) — nm Fig 2 SPECTRAL RESPONSE



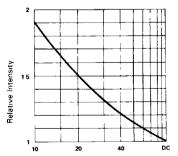
Forward Current (I_F) - mA Fig. 3 RELATIVE, LUMINOUS INTENSITY Vs. FORWARD CURRENT (PER SEGMENT)



Ambient Temperature (Ta) - °C Vs AMBIENT TEMPERATURE



Duty Cycle % (REFRESH RATE F = 1 KHz)



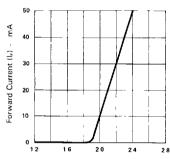
Duty Cycle % Fig 4 MAX ALLOWABLE DC CURRENT PER SEG Fig 5 MAX PEAK CURRENT Vs DUTY CYCLE % Fig 6 LUMINOUS INTENSITY Vs DUTY CYCLE% (AVERAGE IF = 10mA PER SEG)

ELECTRICAL/OPTICAL CHARACTERISTICS AT TA = 25°C LTC-3710E

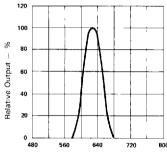
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	lv	750	1800	*	µcd	IF = 10 mA
Peak Emission Wavelength	λρ		630		nm	IF = 20 mA
Spectral Line Half-Width	Δλ		40		nm	IF = 20 mA
Forward Voltage any Segment or D.P.	VF		2.1	2.8	v	IF = 20 mA
Reverse Current, any Segment or D.P.	JR.			100	μΑ	VR = 5 V
Luminous Intensity Matching Ratio	lv-m			2:1		IF = 20 mA

TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES

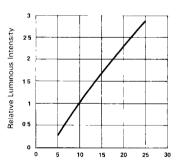
(25°C Ambient Temperature Unless Otherwise Noted)



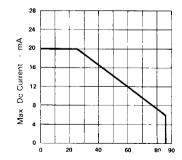
Forward Voltage (V_F) - Volts Fig. 1 FORWARD CURRENT Vs. FORWARD VOLTAGE



Wavelength (λ) — nm Fig. 2 SPECTRAL RESPONSE

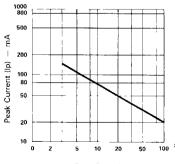


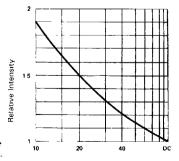
Forward Current (I_F) - mA Fig 3 RELATIVE LUMINOUS INTENSITY Vs FORWARD CURRENT (PER SEGMENT)



Ambient Temperature (Ta) - °C

Vs AMBIENT TEMPERATURE



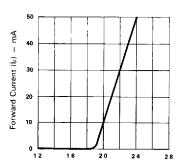


Duty Cycle % Duty Cycle % Fig 4 MAX ALLOWABLE DC CURRENT PER SEG Fig 5 MAX PEAK CURRENT Vs DUTY CYCLE % Fig 6 LUMINOUS INTENSITY Vs DUTY CYCLE% (REFRESH RATE (AVERAGE Is = 10mA PER SEG)

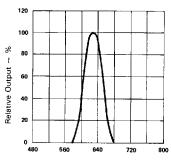
ELECTRICAL/OPTICAL CHARACTERISTICS AT TA = 25°C LTC-3710HR

PARAMETER	SYMBOL	MIN.	TÝP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	ing to the	750	1800		μod	le = 10 mA
Peak Emission Wavelength	λρ		635		nm	IF = 20 mA
Spectral Line Half-Width	Δλ		40		nm	IF = 20 mA
Forward Voltage any Segment or D.P.	VF	2	2.1	2.8	`V··	IF = 20 mA
Reverse Current, any Segment or D.P.	ÌR			100	μΑ	VB = 5 V
Luminous Intensity Matching Ratio	Įv-m			2:1		IF = 20 mA

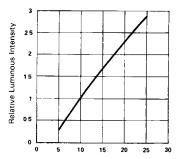
TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES



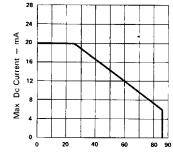
Forward Voltage (V_E) - Volts Fig. 1 FORWARD CURRENT Vs. FORWARD VOLTAGE



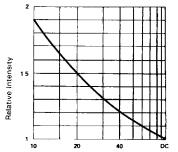
Wavelength (λ) - nm Fig 2 SPECTRAL RESPONSE



Forward Current (I_F) - mA Fig 3 RELATIVE, LUMINOUS INTENSITY Vs FORWARD CURRENT (PER SEGMENT)



500 ٣ ŀ 200 Peak Current (lp) 100 50 20 10 10 20 50 100



Ambient Temperature (Ta) - °C Vs AMBIENT TEMPERATURE

Duty Cycle % (REFRESH RATE - F = 1 KHz)

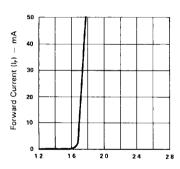
Duty Cycle % Fig 4 MAX ALLOWABLE DC CURRENT PER SEG Fig 5 MAX PEAK CURRENT Vs DUTY CYCLE % Fig 6 LUMINOUS INTENSITY Vs DUTY CYCLE% (AVERAGE IF = 10mA PER SEG)

ELECTRICAL/OPTICAL CHARACTERISTICS AT TA = 25°C LTC-3718R

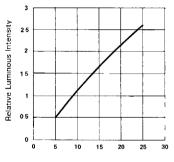
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	lv	200	450		μcd	IF = 10 mA
Peak Emission Wavelength	λр		655		nm	IF = 20 mA
Spectral Line Half-Width	Δλ		24		nm	IF = 20 mA
Forward Voltage any Segment or D.P.	Vr		1.7	2.0	ν	IF = 20 mA
Reverse Current, any Segment or D.P.	JA .			100	μΑ	Vn = 5 V
Luminous Intensity Matching Ratio	lv-m			2:1		IF = 20 mA

TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES

120



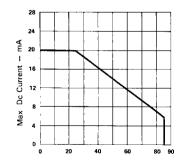
100 % 80 Relative Output 60 40 20 480

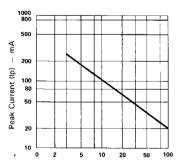


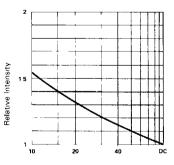
Forward Voltage $\{V_{\rm F}\}$ — Volts Fig 1 FORWARD CURRENT Vs FORWARD VOLTAGE

Wavelength (λ) — nm Fig. 2 SPECTRAL RESPONSE

Forward Current (I_F) - mA Fig 3 RELATIVE, LUMINOUS INTENSITY Vs FORWARD CURRENT (PER SEGMENT)







Ambient Temperature (Ta) - °C

Vs AMBIENT TEMPERATURE

Duty Cycle % (REFRESH RATE - F = 1 KHz)

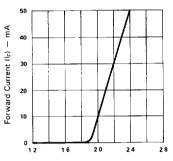
Duty Cycle % Fig 4 MAX ALLOWABLE DC CURRENT PER SEG Fig 5 MAX PEAK CURRENT Vs DUTY CYCLE % Fig 6 LUMINOUS INTENSITY Vs DUTY CYCLE%

(AVERAGE I= 10mA PER SEG)

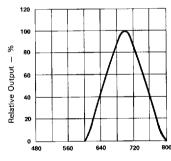
ELECTRICAL/OPTICAL CHARACTERISTICS AT TA = 25°C LTC-3718P

PARAMÉTER	SYMBOL	MIN.	TVP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	įv į	250	600		hod	le ≠ 10 mA
Peak Emission Wavelength	λp		697		, nm	/F = 20 mA
Spectral Line Half-Width	AX.		90		om	l f = 20 m A
Forward Voltage any Segment or D.P.	VE		2.1	2.8	V	fr = 20 mA
Reverse Current, any Segment or D.P.	JR IR	, , , , , , , , , , , , , , , , , , ,		100	иA	VR = 5 V
Luminous Intensity Matching Ratio	lv-m		, i.,	2:1		IF = 20 mA

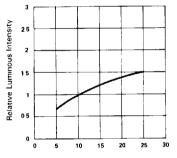
TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES



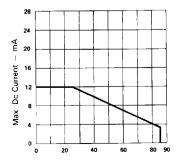
Forward Voltage (V_F) - Volts Fig 1 FORWARD CURRENT Vs FORWARD VOLTAGE



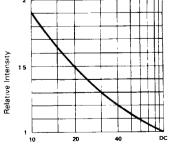
Wavelength (λ) - nm Fig 2 SPECTRAL RESPONSE



Forward Current (I_F) - mA Fig. 3 RELATIVE, LUMINOUS INTENSITY Vs. FORWARD CURRENT (PER SEGMENT)



500 - mA 200 Peak Current (lp) 100 80 50 20 10 0



Ambient Temperature (Ta) - °C Vs AMBIENT TEMPERATURE

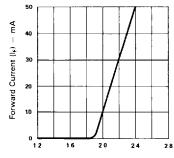
Duty Cycle % (REFRESH RATE - F = 1 KHz)

Duty Cycle % Fig 4 MAX ALLOWABLE DC CURRENT PER SEG Fig 5 MAX PEAK CURRENT Vs DUTY CYCLE % Fig 6 LUMINOUS INTENSITY Vs DUTY CYCLE °0 (AVERAGE IF = 10mA PER SEG)

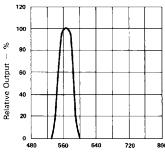
ELECTRICAL/OPTICAL CHARACTERISTICS AT TA = 25°C LTC-3718G

PARAMETER	SYMBOL	MIN.	tvr.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	A. W.	750	1800		⊯ćd	le ≠10 mA
Peak Emission Wavelength	AP ()		565		nm	IF = 20 mA
Spectral Line Half-Width	Δ λ) }	30		nm	IF = 20 mA
Forward Voltage any Segment or D.P.	V#		2.1	2.8	V	1F = 20 mA
Reverse Current, any Segment or D.P.	(IR			100	μΑ	VR = 5 V
Luminous Intensity Matching Ratio	/ lv-m			2:1		lF = 20 mA

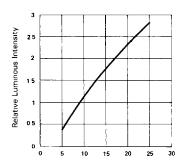
TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES



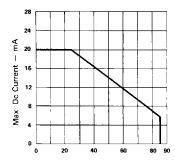
Forward Voltage $\{V_F\}$ — Volts Fig 1 FORWARD CURRENT Vs. FORWARD VOLTAGE

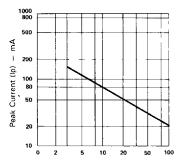


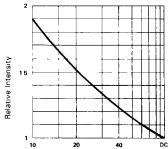
Wavelength (λ) \sim nm Fig 2 SPECTRAL RESPONSE



Forward Current (I_F) — mA Fig 3 RELATIVE LUMINOUS INTENSITY Vs FORWARD CURRENT (PER SEGMENT)







Ambient Temperature (Ta) - °C Duty Cycle % Duty Cycle %

Fig 4 MAX ALLOWABLE DC CURRENT PER SEG Vs AMBIENT TEMPERATURE

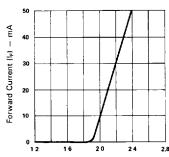
Duty Cycle %

Fig 5 MAX PEAK CURRENT Vs DUTY CYCLE % Fig 6 LUMINOUS INTENSITY Vs DUTY CYCLE% (AVERAGE I_F = 10mA PER SEG)

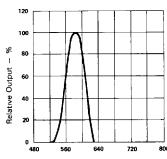
er Company of the Company of the Company of
ELECTRICAL/OPTICAL CHARACTERISTICS AT TA = 25°C LTC-3718Y

PARAMETER	SYMBOL	MIN.	TYP	MAX.	, UNIT.	TEST CONDITION
Average Luminous Intensity	ly	600	1300		μcd	IF = 10 mA
Peak Emission Wavelength	λp		585		'nm	IF = 20 mA
Spectral Line Half-Width	A		35		nm	if = 20 mA
Forward Voltage any Segment or D.P.	V •		2.1	2.8	٧,	IF = 20 mA
Reverse Current, any Segment or D.P.	in .			100 ←	μΑ	VR = 5 V
Luminous Intensity Matching Ratio	lv-m			2:1		IF = 20 mA

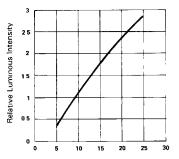
TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES



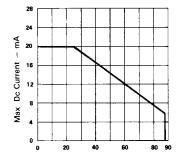
Forward Voltage (V_F) - Volts Fig 1 FORWARD CURRENT Vs FORWARD VOLTAGE



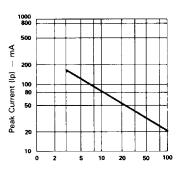
Wavelength (λ) - nm Fig 2 SPECTRAL RESPONSE



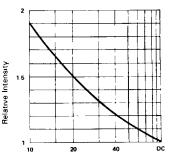
Forward Current (I_F) - mA Fig 3 RELATIVE, LUMINOUS INTENSITY Vs. FORWARD CURRENT (PER SEGMENT)



Ambient Temperature (Ta) - °C Vs AMBIENT TEMPERATURE



Duty Cycle % Fig 4 MAX ALLOWABLE DC CURRENT PER SEG Fig 5 MAX PEAK CURRENT Vs DUTY CYCLE $^{\circ}_{\circ}$ (REFRESH RATE - F = 1 KHz)



Duty Cycle % Fig 6 LUMINOUS INTENSITY Vs DUTY CYCLE% (AVERAGE IF = 10mA PER SEG)

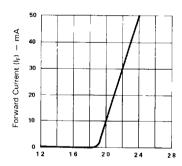
MUTUAL STATE OF THE STATE OF TH

ELECTRICAL/OPTICAL CHARACTERISTICS AT TA = 25°C LTC-3718E

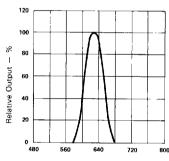
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	lv	750	1800		μcd	. IF = 10 mA
Peak Emission Wavelength	λp		630		nm	IF = 20 mA
Spectral Line Half-Width	Δλ		40		nm	IF = 20 mA
Forward Voltage any Segment or D.P.	VF		2.1	2.8	V	IF = 20 mA
Reverse Current, any Segment or D.P.	la .	-		100	μΑ	VR = 5 V
Luminous Intensity Matching Ratio	lv-m			2:1		IF = 20 mA

TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES

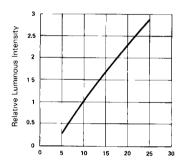
1000 800



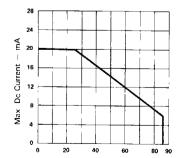
Forward Voltage (V_F) - Volts Fig 1 FORWARD CURRENT Vs. FORWARD VOLTAGE



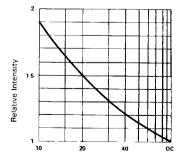
Wavelength (λ) - nm Fig. 2 SPECTRAL RESPONSE



Forward Current (I_F) = mAFig 3 RELATIVE, LUMINOUS INTENSITY Vs FORWARD CURRENT (PER SEGMENT)



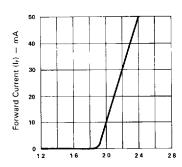
500 ı Current (lp) 100 80 50 20 10



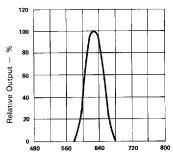
Ambient Temperature (Ta) = °C Duty Cycle % Duty Cycle % Fig 4 MAX ALLOWABLE DC CURRENT PER SEG Fig 5 MAX PEAK CURRENT Vs DUTY CYCLE % Fig 6 LUMINOUS INTENSITY Vs DUTY CYCLE% (REFRESH RATE - F = 1 KHz) Vs AMBIENT TEMPERATURE (AVERAGE Is = 10mA PER SEG)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	lv T	750	1800		μœd	jr = 10 mA
Peak Emission Wavelength	λρ		635		nm ·	IF = 20 mA
Spectral Line Half-Width	Δλ		40		ŋm	iF = 20 mA
Forward Voltage any Segment or D.P.	VF		2,1	2.8	V	IF = 20 mA
Reverse Current, any Segment or D.P.	1R			100	μΑ	VR = 5 V
Luminous Intensity Matching Ratio	. Iv-m			2:1		IF = 20 mA

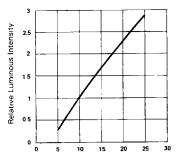
TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES



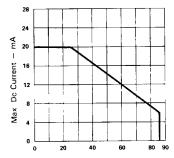
Forward Voltage (V_{F}) — Volts Fig 1 FORWARD CURRENT Vs. FORWARD VOLTAGE

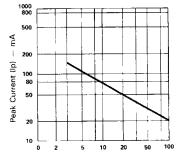


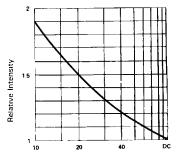
 $\label{eq:wavelength} \begin{aligned} &\text{Wavelength (} \lambda \text{)} - \text{nm} \\ &\text{Fig 2 SPECTRAL RESPONSE} \end{aligned}$



Forward Current (I_F) — mA Fig 3 RELATIVE, LUMINOUS INTENSITY Vs FORWARD CURRENT (PER SEGMENT)







Ambient Temperature (Ta) - °C Duty Cycle % Duty Cycle %

Fig 4 MAX ALLOWABLE DC CURRENT PER SEG Fig 5 MAX PEAK CURRENT Vs DUTY CYCLE % Fig 6 LUMINOUS INTENSITY Vs DUTY CYCLE % Vs AMBIENT TEMPERATURE (REFRESH RATE - F - 1 KHz) (AVERAGE I_F = 10mA PER SEG)