3MM ROUND LED LAMP [3MM □□□□□]

JZL-Y304D-F0

DATA SHEET

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DOCUMENT NO.: **WI-RD-LDS-SY304D-F0**
□ □ □ □

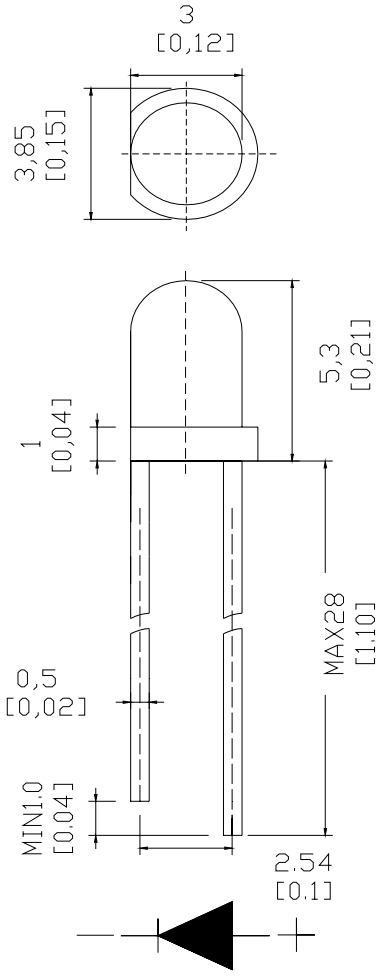
RELEASE DATE: **2007- 12-6**
□□□□

VERSION: **A/0**
□□

PART NO [□□□□] .: JZL-Y304D-F0

Features:	Application:	□□:	□□□:
■3mm Round lamp	Indicator	■ 3mm □□	□□□
■ Lens color: Yellow Diffused	Decoration	■ □□□□: □□□□	□□
■ Emitting color: Yellow	Lighting	■ □□□□: □□	□□
■ viewing angle:60°	others	■ □□□□:60°	□□
■ Leads with stand-offs:NO		■ □□□□□□: □	
■ RoHS compliant		■ □□ RoHS □□	

Package Dimensions[□□□□□□]



Notes [□□]:

1. All dimension are in millimeters orInch tolerance is±0.25mm unless otherwisenoted.
   □□□□□□□□□□□□□□□□□□□□□□□□±0.25mm□
2. Specifications are subject to change without notice.
   . □□□□□□□□□□□□□□□□□□

Absolute Maximum Rating at=Ta=25□

[□ 25□□□□□□□□□]

Power Dissipation [□□□□]	70	mW
Peak Forward Current [□□□□□□] (1/10 Duty Cycle, 0.1ms Pulse Width)	120	mA
Forward Current [□□□□]	25	mA
Operating Temperature Range [□□□□]	-30□ to +85□	
Storage Temperature Range [□□□□]	-40□ to +100□	
Lead Soldering Temperature [3mm From Body] [□□□□]	260□ for 3 Seconds	

Electrical /Optical Characteristics at Ta=25□

[□ 25□□□□□□/□□□□]

Description	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	VF	IF=20mA	1.8	2.0	2.4	V
Reverse Current	IR	VR=5V	/	/	10	μA
Dominant Wavelength	λD	IF=20mA	/	592	/	nm
Luminous Intensity	Iv	IF=20mA	/	30	/	mcd
Half V-angle	2θ1/2H-H	IF=20mA	/	60	/	deg
	2θ1/2V-V	IF=20mA	/	/	/	deg

1. Vf maximum tolerance for each bin include is ±0.1V.
   (BIN ±0.1V)

2. Iv maximum tolerance for each bin Include is ±15%.
   (BIN ±15%)

3. λD maximum tolerance for each bin Include is ±1nm.
   (BIN ±1nm)

Typical Optical-Electronic Characteristic Curves

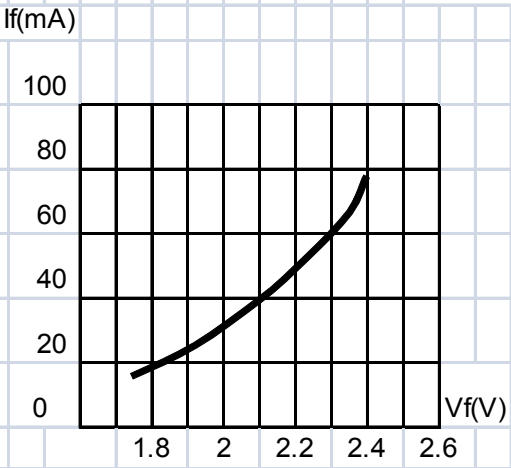


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

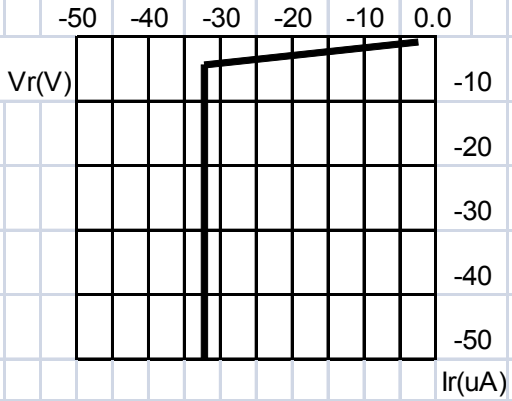


Fig.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

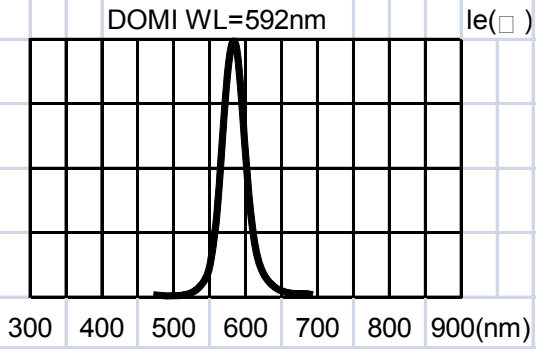


Fig.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

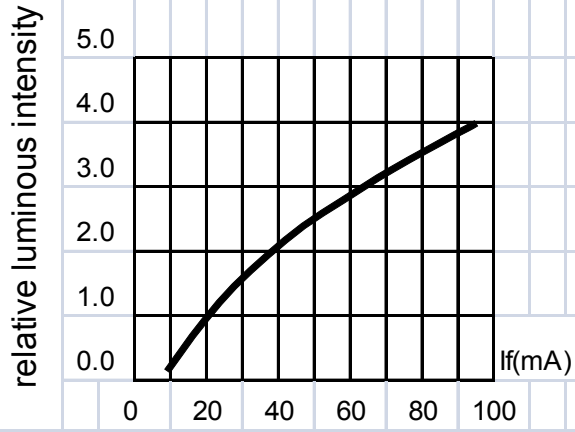


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD

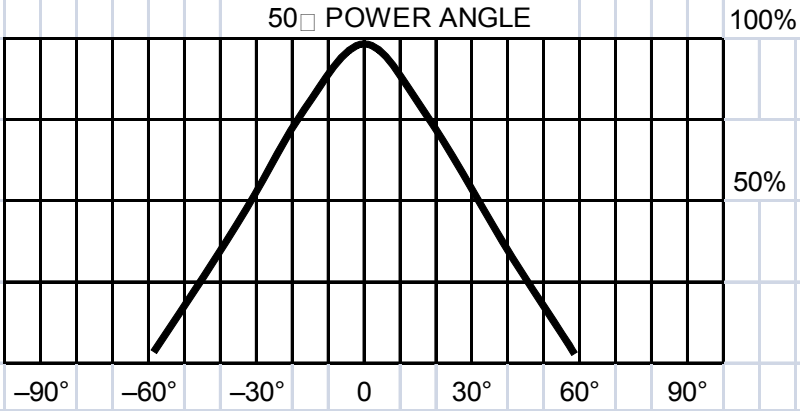


Fig.5 FAR FIELD PATTERN

CAUTIONS:

Storage time

1. The operation of Temperatures and RH are: 5□~35□, RH60%.
2. Once the package is opened, the products should be used within a week.
   Otherwise, they should be kept in a damp proof box with descanting agent.
   Considering the tape life, we suggest our customers to use our products within a year(from production date).
3. If opened more than one week in an atmosphere 5□~ 35□, RH60%, they should be treated at 60□±5 □for 15hours.

Cleaning

Use alcohol-based cleaning solvents such as isopropyl alcohol to clean the LED.

ESD(Electrostatic Discharge)

Static Electricity or power surge will damage the LED. Use of a conductive wrist band or anti-electrosatic glove is recommended when handing these LED. All devices, equipment and machinery must be properly grounded

□□:

1. : 5 -35 ,60%RH.
2. , , ;
   , ( );
3. 5 -35 60% RH , 60 ±5 15 .

ESD( )

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Reliability Test:

(1)Test Items And Results

Test Item	Standard Test Method	Test Conditions	Note	Number of Damaged
Resistance to Soldering Heat	JEITA ED-4701 300 302	Tsld=260± 5□,10sec. 3mm from the base of the epoxy bulb	1time	0/100
Solderability	JEITA ED-4701 300 303	Tsld=235+ 5□,5sec. (using flux)	1time over 95%	0/100
Thermal Shock	JEITA ED-4701 300 307	-40□/15min.~100□/15min.	100cycles	0/100
Temperature Cycle	JEITA ED-4701 100 105	-40□/30min.~25□/5min. ~100□/30min.~25□/5min.	100cycles	0/100
Moisture Resistance Cyclic	JEITA ED-4701 200 203	25□~65□~-10□ 90%RH 24hrs./1cycle	10cycles	0/100
Terminal Strength(bending test)	JEITA ED-4701 400 401	Load 5N(0.5kgf) 0°~90°~0°bend 2 times	No noticeable damage	0/100
Terminal Strength(pull test)	JEITA ED-4701 400 401	Load 10N(1kgf)10±1sec.	No noticeable damage	0/100
High temperature Storage	JEITA ED-4701 200 201	Ta=100□	1000hrs.	0/100
Temperature Humidity Storage	JEITA ED-4701 100 103	Ta=60□,RH=90%	1000hrs.	0/100
Low Temperature Storage	JEITA ED-4701 200 202	Ta=-40□	1000hrs.	0/100
Steady state Operating Life		Ta=25□,IF=20mA	1000hrs.	0/100
Steady State Operating Life of High Humidity Heat		60□,RH=90%,IF=20mA	500hrs.	0/100
Steady State Operating Life of Low Temperature		Ta=-30□,IF=20mA	1000hrs.	0/100
Resistance to UV Beam		365nm/75W/mm	192hrs.	0/100

(2)Criteria For Judging The Damage

Item	Symbol	Test Conditions	Criteria for Judgement	
			Min.	Max.
Forward Voltage	Vf	IF=20mA	-	U.S.L.*) x 1.1
Reverse Current	Ir	VR=5V	-	U.S.L.*) x 2.0
Luminous Intensity	Iv	IF=20mA	L.S.L.**) x 0.7	-

*)U.S.L:Upper Standard Level **)L.S.L:Lower Standard Level

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(1) □□□□□□□

□□□□	□□□□	□□□□	□□	□□□/□□□
□□□	JEITA ED-4701 300 302	Tsld=260± 5□,10sec. 3mm from the base of the epoxy bulb	1time	0/100
□□□□ (□□□)	JEITA ED-4701 300 303	Tsld=235+ 5□,5sec. (using flux)	1time over 95%	0/100
□□□□	JEITA ED-4701 300 307	-40□/15min.~100□/15min.	100cycles	0/100
□□□□	JEITA ED-4701 100 105	-40□/30min.~25□/5min. ~100□/30min.~25□/5min.	100cycles	0/100
□□□□	JEITA ED-4701 200 203	25□~65□~-10□ 90%RH 24hrs./1cycle	10cycles	0/100
□□□□ (□□□□)	JEITA ED-4701 400 401	Load 5N(0.5kgf) 0°~90°~0°bend 2 times	No noticeable damage	0/100
□□□□ (□□□□)	JEITA ED-4701 400 401	Load 10N(1kgf)10±1sec.	No noticeable damage	0/100
□□□□	JEITA ED-4701 200 201	Ta=100□	1000hrs.	0/100
□□□□	JEITA ED-4701 100 103	Ta=60□,RH=90%	1000hrs.	0/100
□□□□	JEITA ED-4701 200 202	Ta=-40□	1000hrs.	0/100
□□□□□□		Ta=25□,IF=20mA	1000hrs.	0/100
□□□□□□□□		60□,RH=90%,IF=20mA	500hrs.	0/100
□□□□□□□		Ta=-30□,IF=20mA	1000hrs.	0/100
□□□□□□		365nm/75W/mm	192hrs.	0/100

(2) □□□□□□□□

□□	□□	□□□□	□□□□	
			□□	□□
□□□□	Vf	IF=20mA	-	U.S.L.*) x 1.1
□□□	Ir	VR=5V	-	U.S.L.*) x 2.0
□□□□	Iv	IF=20mA	L.S.L.**) x 0.7	-
*)U.S.L:Upper Standard Level			**)L.S.L:Lower Standard Level	