



SILSMART

中山市晶明光电科技有限公司

ZHONGSHAN SILSMART OPTOELECTRONICS CO., LTD.

DATA SHEET

PART NO. : 5R4FY33C-3A

DATE : 2017/7/27

DEPARTMENT : R&D

REVISION : 1.0

RECEIVED			
<input checked="" type="checkbox"/> MASS PRODUCTION			
<input type="checkbox"/> PRELIMINARY			
<input type="checkbox"/> CUSTOMER DESIGN			
DEVICE NUMBER : JMDL-5R3-159			
PAGE : 4			
CUSTOMER	DESIGNER	CHECKER	APPROVER

REV.	DESCRIPTION	RELEASE DATE

Address: Bld 2, The First Business Estate, 1st MinYing Road, Shiqi District, Zhongshan, Guangdong, P.R. China 528402
 TEL : (+86 760) 88323449 88324139
 FAX : (+86 760) 88321064 88235016
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Device Number: JMDL-5R3-159

REV: 1.0

5.0mm Round Type LED Lamps

Model No.: 5R4FY33C-3A

ECN: _____

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■ Features :

- High radiant intensity
- Choice of various viewing angles
- Reliable and robust

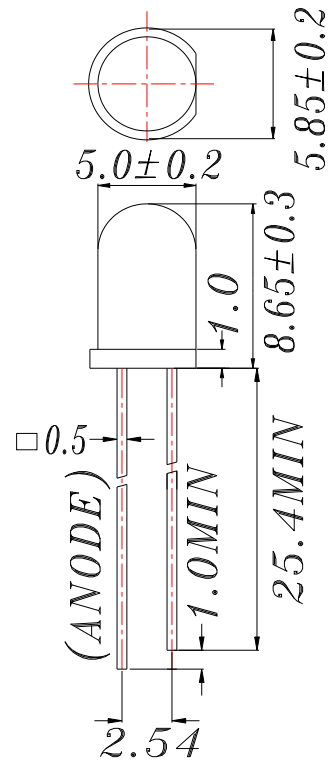
■ Descriptions :

- The series is specially designed for applications requiring higher brightness.
- The led lamps are available with different colors, intensities epoxy colors,etc.

■ Applications :

- TV set
- Monitor
- Telephone
- Computer

■ Package Dimensions:



- Notes:**
1. All dimensions are in millimetres
 2. An epoxy meniscus may extend about 1.5mm(0.059") down to the lead.
 3. Tolerances unless Dimension $\pm 0.25\text{mm}$.

PART NO.	Chip		Lens Color
	Material	Emitted Color	
5R4FY33C-3A	AlGaInP	Yellow	Water Clear

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Prepared by: Frank

Prepared date: 17/7/27

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J05



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■ Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Rating	Unit
Forward Current	IF	25	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Soldering Temperature	Tsol	260 ± 5	°C
Power Dissipation	Pd	100	mW
Peak Forward Current	IF(Peak)	160	mA
Reverse Voltage	VR	5	V

Note: *1:IFP Conditions --Pulse Width ≤ 1msec and Duty ≤ 1/10.

*2:Soldering time ≤ 5 seconds.

Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	VF	IF= 20 mA	/	2.0	2.4	V
Reverse Current	IR	VR= 5 V	/	/	10	μA
Luminous Intensity	Iv	IF= 20 mA	1500	3000	/	mcd
Viewing Angle	2θ 1/2	IF= 20 mA	/	50	/	deg
Peak Wavelength	λ p	IF= 20 mA	/	595	/	nm
Dominant Wavelength	λ d	IF= 20 mA	/	590	/	nm
Spectrum Radiation Bandwidth	Δλ	IF= 20 mA	/	16	/	nm

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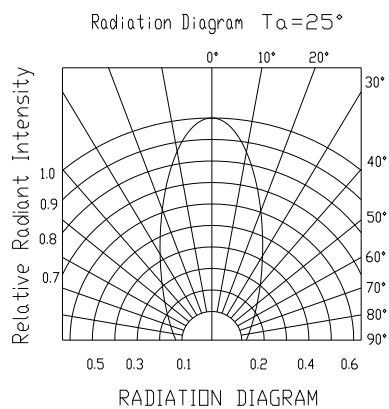
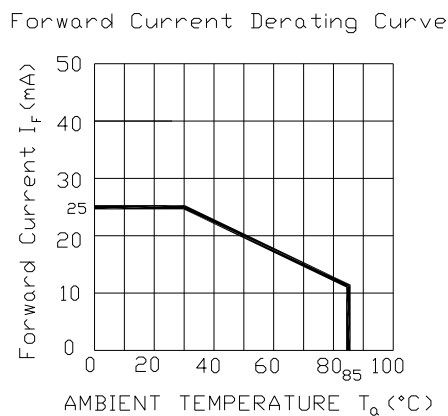
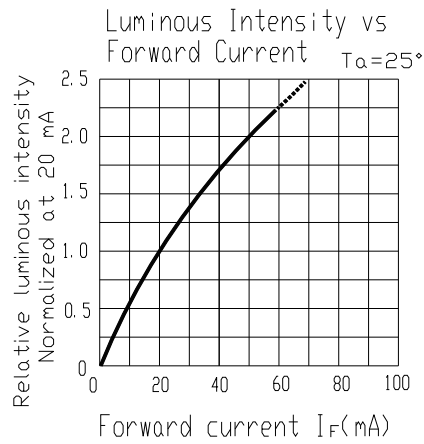
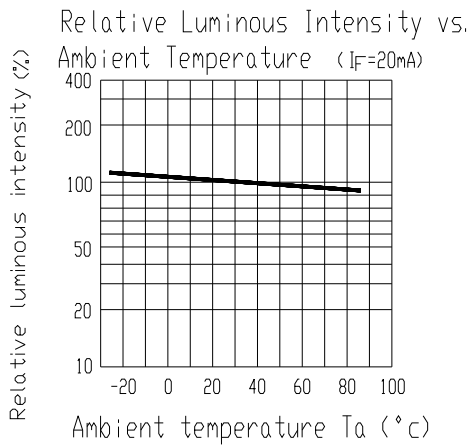
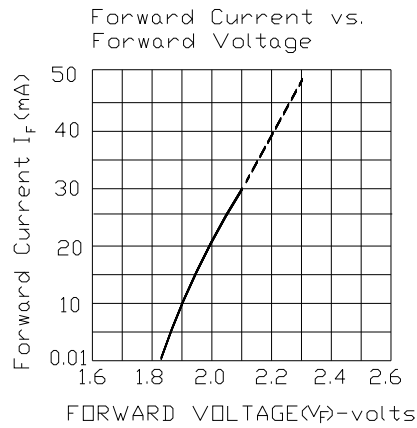
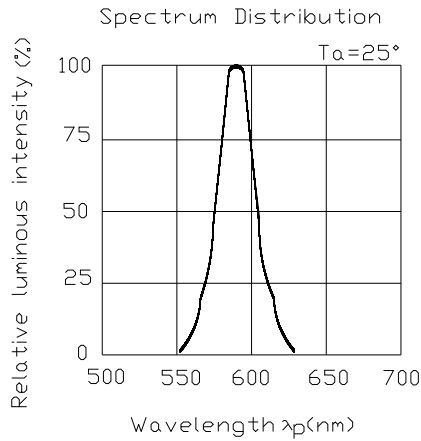
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Typical Electro-Optical Characteristic Curves:





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■ Reliability test items and conditions:

NO	Item	Test Conditions	Test Hours/Cycle	Sample	Ac/Re
1	Solder Heat	TEMP : 260°C ± 5 °C	10 SEC	76 PCS	0/1
2	Temperature Cycle	H : +100°C 15min ∩ 5 min L : -40°C 15min	300 CYCLES	76 PCS	0/1
3	Thermal Shock	H : +85°C 5min ∩ 10 sec L : -10°C 5min	300 CYCLES	76 PCS	0/1
4	High Temperature Storage	TEMP : 100°C	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -40°C	1000 HRS	76 PCS	0/1
6	DC Operating Life	TEMP : 25°C IF = 20mA	1000 HRS	76 PCS	0/1
7	High Temperature/ High Humidity	85°C / 85% RH	1000 HRS	76 PCS	0/1

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