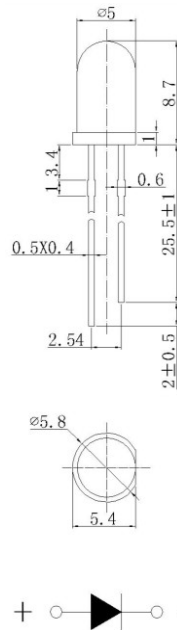


Specification for LED Product

3727

Package Dimensions(mm)



Notes:

All dimension units are millimeters.

All dimension tolerance is ± 0.2 mm unless otherwise noted.

An epoxy meniscus may extend about 1.5mm down the leads.

Burr around bottom of epoxy may be 0.5mm max.

Synopsis:

5mm Round Type

Water Clear Lens

Yellow LED Lamp

3727

■ Typical Electrical & Optical Characteristics (Ta = 25 °C)

ITEMS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	VF	IF = 20mA	1,4	1,9	2,4	V
Reverse Current	IR	VR = 5V	---	---	1,1	μA
Dominant Wavelength	λ D	IF = 20mA	586	---	590	nm
Luminous Intensity	IV	IF = 20mA	2338	2685	3395	mcd
50% Power Viewing Angle	2θ½	IF = 20mA	---	13	---	deg

■ Absolute Maximum Ratings at (Ta = 25 °C)

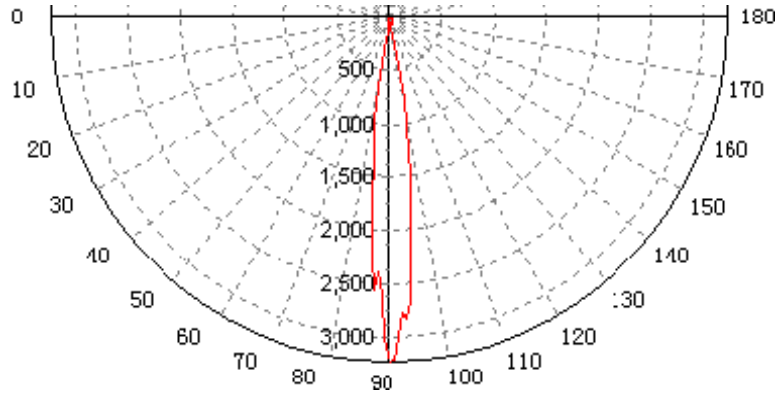
ITEMS	SYMBOL	ABSOLUTE MAXIMUM RATING	UNIT
Forward Current	IF	50	mA
Peak Forward Current	IFP	220	mA
Continuous Forward Current	IL	20	mA
Reverse Voltage	VR	5	V
Power Dissipation	PD	95	mW
Operation Temperature	Topr	-40 ~ +80	°C
Storage Temperature	Tstg	-40 ~ +80	°C
Lead Soldering Temperature	Tsol	Max.260°C for 5 sec Max.	

IFP Conditions: Pulse Width ≤ 10msec duty ≤ 1/10

Tsol Conditions: 4mm from the base of the epoxy bulb

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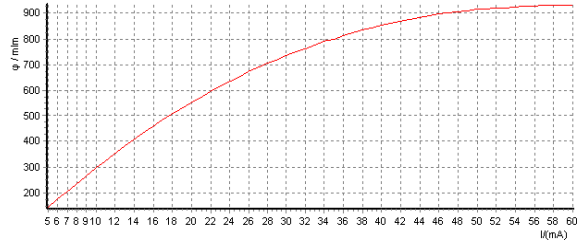
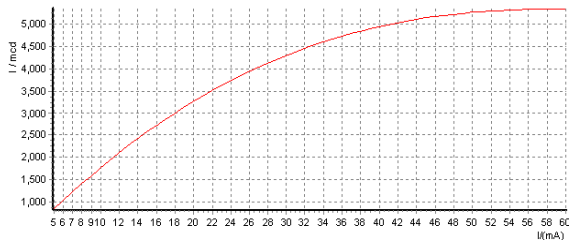
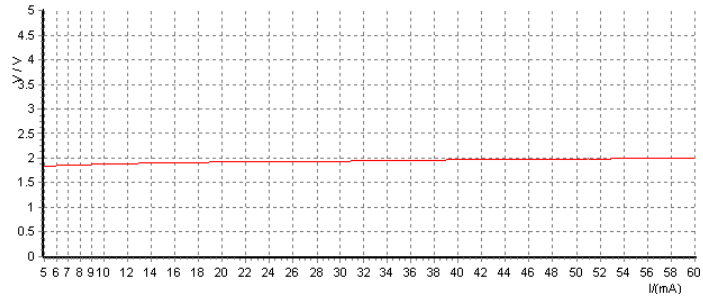
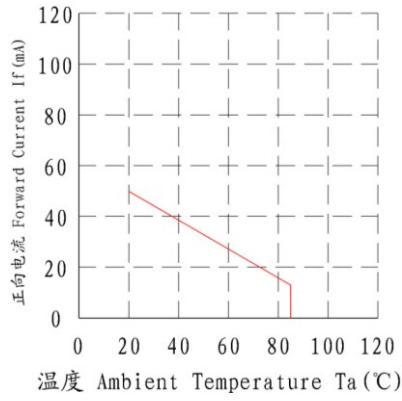
Spatial Distribution



Reliability Performance

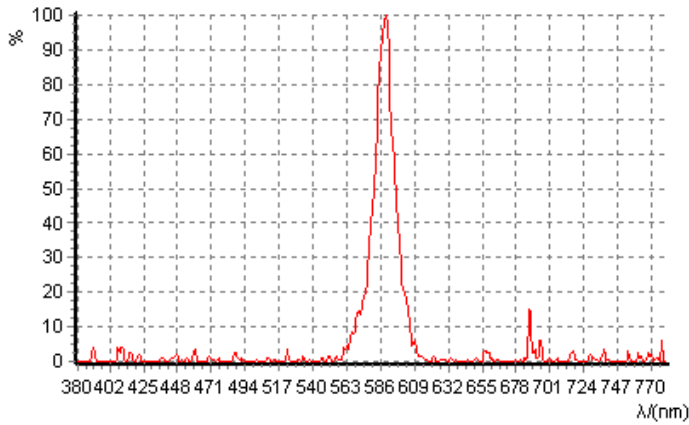
Test Classification	Test Item	Test Conditions	Test Duration	Sample Size	Standard
Life Test	Life Test	Ta=25°C±5°C, IF=20mA	1000(hrs)	10PCS	Qualified
Environment Test	Thermal Shock Test	-10 ±5 ←→+100 ±5 5min. 10sec. 5min.	100(cycles)	10PCS	Qualified
	Temperature Cycle Test	-55 ±5 ←→+85 ±5 30min. 5min. 30min.	100(cycles)	10PCS	Qualified
	High Temperature & High Humidity Test	Ta=85°C±5°C RH =85%±0.5 %RH	240(hrs)	10PCS	Qualified
	High Temperature Storage	Ta=100°C±5°C	1000(hrs)	10PCS	Qualified
	Low Temperature Storage	Ta=-55°C±5°C	1000(hrs)	10PCS	Qualified
Mechanical Test	Resistance to Soldering Heat	Ta=260°C±5°C	5 (sec.)	10PCS	Qualified
	Lead Integrity	0° ~ 90° ~ 0°	3 (times)	10PCS	Qualified

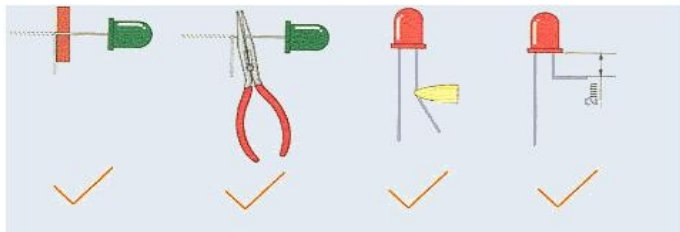
Typical Optical/Electrical Characteristics Curves (Ta=25 °C Unless Otherwise Noted)



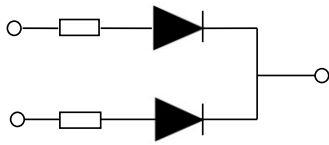
Current-Luminous intensity Curve

Current-Luminous flux Curve





Circuit model A



Circuit model B

