

■ Absolute Maximum Rating

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	I _F	20	mA
Peak Forward Current*	I _{FP}	100	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	50	mW
Electrostatic discharge	E _{SD}	2000	V
Operation Temperature	T _{opr}	-25~+80	°C
Storage Temperature	T _{stg}	-5~+45	°C
Lead Soldering Temperature*	T _{sol}	Max. 260°C for 5sec Max.	

*I_{FP} Conditions: Pulse Width≤10msec

*T_{sol} Conditions: 3mm from the base of the epoxy bulb

■ Typical Optical/ Electrical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F =20mA	1.8	2.2	2.6	V
50% Power Angle	2θ 1/2		--	120	--	deg
Luminous Intensity	I _v		440	530	--	mcd
Prpc Wavelength	λD		621	--	628	nm
Recommend Forward Current	I _F (rec)	--	--	--	20	mA
Reverse Current	I _R	V _r =5V	--	--	20	uA

Notes:

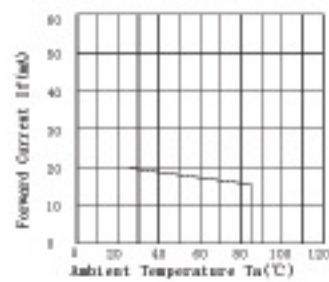
- 1.Absolute maximum ratings Ta=25°C.
- 2.Tolerance of measurement of forward voltage±0.1V.
- 3.Tolerance of measurement of peak Wavelength±2.0nm.
- 4.Tolerance of measurement of luminous intensity±15%.
- 5.Tolerance of measurement of angle intensity±15%.

■ Reliability Performance

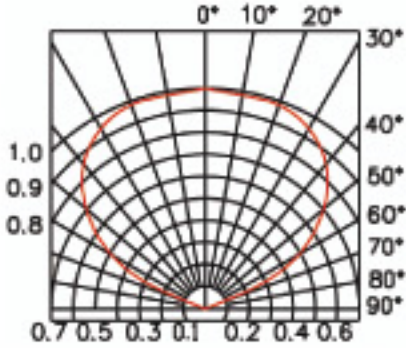
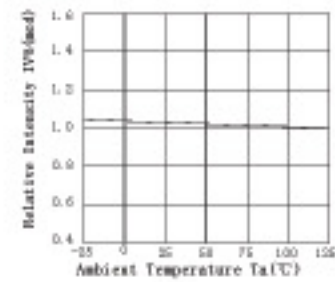
Test Items And Result

Test Classification	Test Item	Test Conditions	Test Duration	Sample Size	AC/RE
Life Test	Room Temperature DC Operating Life Test	Ta=25°C±5°C, I _F =20mA	1000 hrs	22 pcs	0/1
Environment Test	Thermal Shock Test	-10°C±5°C→+100°C±5°C 5min. 10sec. 5min.	50 cycles	22 pcs	0/1
	Temperature Cycle Test	-40°C±5°C→+85°C±5°C 30min. 5min. 30min.	50 cycles	22 pcs	0/1
	High Temperature & High Humidity Test	Ta=85°C±5°C RH =85%±5 %RH	1000 hrs	22 pcs	0/1
	High Temperature Storage	Ta=100°C±5°C	1000 hrs	22 pcs	0/1
	Low Temperature Storage	Ta=-55°C±5°C	1000 hrs	22 pcs	0/1
Mechanical Test	Resistance to Soldering Heat	Ta=230°C±5°C	5sec.	22 pcs	0/1
	Lead Integrity	Load 2.5N(0.25kgf) 0° ~ 90° ~0°	3times	22 pcs	0/1

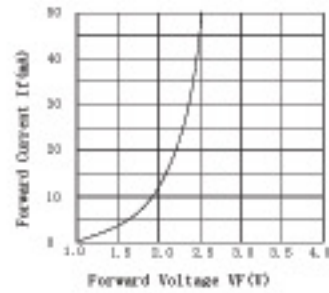
Forward Current vs. Ambient Temperature



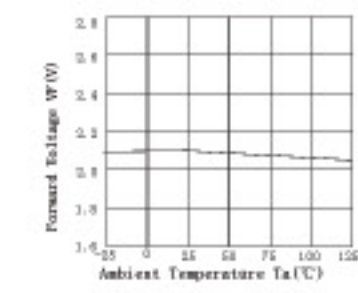
Relative Intensity vs. Ambient Temperature



Forward Current vs. Forward Voltage



Forward Voltage vs. Ambient Temperature



Luminous Spectrum (Ta=25°C) SPECTRAL RADIANCE

