

# BOMBIN AMARILLO

## Absolute Maximum Rating

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	I <sub>F</sub>	20	mA
Peak Forward Current*	I <sub>FP</sub>	100	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	P <sub>D</sub>	50	mW
Electrostatic discharge	ESD	2000	V
Operation Temperature	T <sub>opr</sub>	-25~+80	°C
Storage Temperature	T <sub>stg</sub>	-5~+45	°C
Lead Soldering Temperature*	T <sub>sol</sub>	Max. 260°C for 5sec Max.	

\*I<sub>FP</sub> Conditions: Pulse Width ≤ 10msec

\*T<sub>sol</sub> Conditions: 3mm from the base of the epoxy bulb

## Typical Optical/ Electrical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	1.8	2.2	2.6	V
50% Power Angle	2θ 1/2		--	120	--	deg
Luminous Intensity	I <sub>v</sub>		430	530	--	mcd
Prcp Wavelength	λD		586	--	593	nm
Recommend Forward Current	I <sub>F</sub> (rec)	--	--	--	20	mA
Reverse Current	I <sub>R</sub>	V <sub>r</sub> =5V	--	--	20	uA

### Notes:

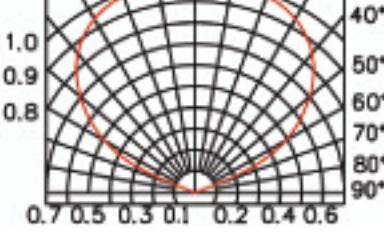
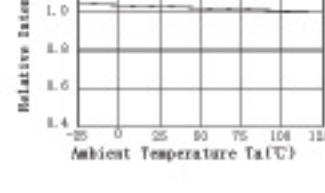
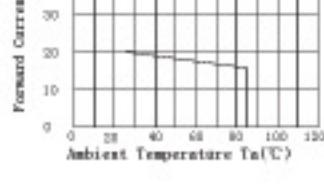
1. Absolute maximum ratings Ta=25°C.
2. Tolerance of measurement of forward voltage ± 0.1V.
3. Tolerance of measurement of peak Wavelength ± 2.0nm.
4. Tolerance of measurement of luminous intensity ± 15%.
5. Tolerance of measurement of angle intensity ± 15%.

## Reliability Performance

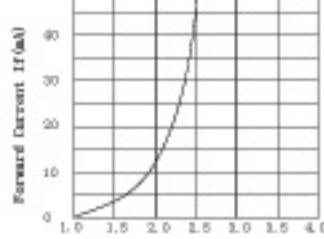
### Test Items And Result

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 <sub>F</sub> =20mA	1000hrs	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%±0.5 %RH	1000hrs	22 pcs	0/1
	High Temperature Storage	Ta=100°C±5°C	1000hrs	22 pcs	0/1
	Low Temperature Storage	Ta=-55°C±5°C	1000hrs	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

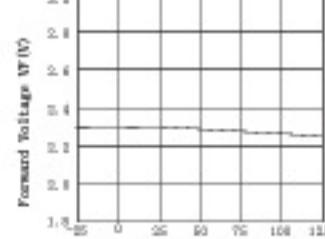
Forward Current vs. Ambient Temperature      Relative Intensity vs. Ambient Temperature



Forward Current vs. Forward Voltage



Forward Voltage vs. Ambient Temperature



Luminous Spectrum (Ta=25°C)      SPECTRAL RADIANCE

