

BOMBIN AZUL

Forward Current	I_F	20	mA
Peak Forward Current*	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	80	mW
Electrostatic discharge	E_{SD}	500	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 $\leq 10\text{msec}$

* 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	$I_F=20\text{mA}$	2.8	3.2	3.6	V
50% Power Angle	$2\theta_{1/2}$		--	120	--	deg
Luminous Intensity	I_v		450	480	--	mcd
Prkp Wavelength	λ_D		462.5	--	465	nm
Recommend Forward Current	$I_F(\text{rec})$	--	--	--	20	mA
Reverse Current	I_R	$V_r=5\text{V}$	--	--	10	uA

Notes:

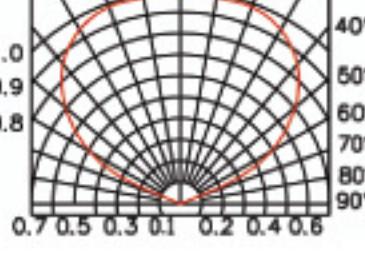
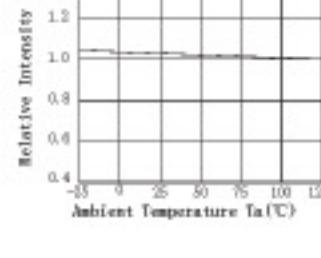
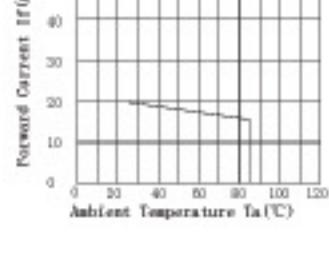
- Absolute maximum ratings $T_a=25^\circ\text{C}$.
- Tolerance of measurement of forward voltage $\pm 0.1\text{V}$.
- Tolerance of measurement of peak Wavelength $\pm 2.0\text{nm}$.
- Tolerance of measurement of luminous intensity $\pm 15\%$.
- Tolerance of measurement of angle intensity $\pm 15\%$.

■ Reliability Performance

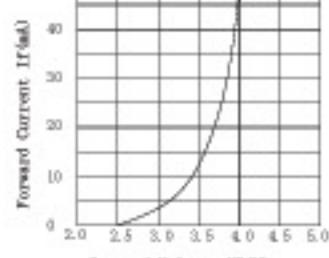
Test Items And Result

Test Classification	Test Item	Test Conditions	Test Duration	Sample Size	AC/RE
Environment Test	Room Temperature DC Operating Life Test	$T_a=25^\circ\text{C}\pm 5^\circ\text{C}$, $I_F=20\text{mA}$	1000 hrs	22 pcs	0/1
	Thermal Shock Test	$-10^\circ\text{C}\pm 5^\circ\text{C} \rightarrow +100^\circ\text{C}\pm 5^\circ\text{C}$ 5min. 10sec. 5min.	50 cycles	22 pcs	0/1
	Temperature Cycle Test	$-40^\circ\text{C}\pm 5^\circ\text{C} \rightarrow +85^\circ\text{C}\pm 5^\circ\text{C}$ 30min. 5min. 30min.	50 cycles	22 pcs	0/1
	High Temperature & High Humidity Test	$T_a=85^\circ\text{C}\pm 5^\circ\text{C}$ $RH=85\%\pm 0.5\%RH$	1000 hrs	22 pcs	0/1
	High Temperature Storage	$T_a=100^\circ\text{C}\pm 5^\circ\text{C}$	1000 hrs	22 pcs	0/1
	Low Temperature Storage	$T_a=-55^\circ\text{C}\pm 5^\circ\text{C}$	1000 hrs	22 pcs	0/1
Mechanical Test	Resistance to Soldering Heat	$T_a=230^\circ\text{C}\pm 5^\circ\text{C}$	5sec.	22 pcs	0/1
	Lead Integrity	Load 2.5N(0.25kgf) $0^\circ \sim 90^\circ \sim 0^\circ$	3times	22 pcs	0/1

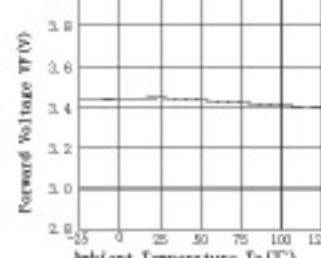
Forward Current vs. Ambient Temperature Relative Intensity vs. Ambient Temperature



Forward Current vs. Forward Voltage



Forward Voltage vs. Ambient Temperature



Luminous Spectrum ($T_a=25^\circ\text{C}$) SPECTRAL RADIANCE

