



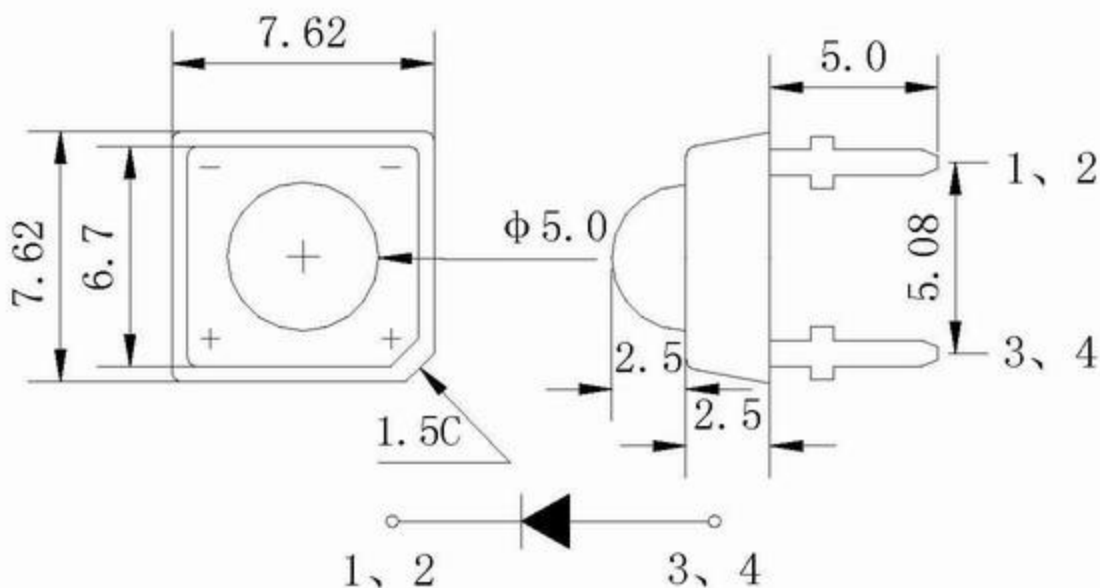
ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Features

- $\phi 5$ Super Flux LED.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- PACKAGE: 60PCS / PIPE.



Package Dimensions



Description

This devices are made with TS InGaAlP.

Tolerance Grade	Dimension Tolerance (UNIT:mm)			
	0.5~3	3~6	6~30	30~120
Medium(m)	± 0.1	± 0.2	± 0.3	± 0.5
Chip		Lens Color		
Material	Emitting Color	Water Clear		
InGaAlP	Red			

■ 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	80	mW
Electrostatic discharge	E_{SD}	2000	V
Operation Temperature	T_{opr}	-30~+80	°C
Storage Temperature	T_{stg}	-30~+80	°C
Lead Soldering Temperature*	T_{sol}	Max. 260°C for 5sec Max.	

* I_{FP} Conditions: Pulse Width ≤ 10 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	$I_F=20$ mA	1.8	2.2	2.6	V
50% Power Angle	2θ 1/2		--	80	--	deg
Luminous Intensity	I_V		600	780	--	mcd
Luminous Flux	ϕ_V		--	2.0	--	lm
Prnp Wavelength	λ_D		620	--	626	nm
Recommend Forward Current	$I_{F(rec)}$	--	--	--	20	mA
Reverse Current	I_R	$V_r=5$ V	--	--	20	μ A

Notes:

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

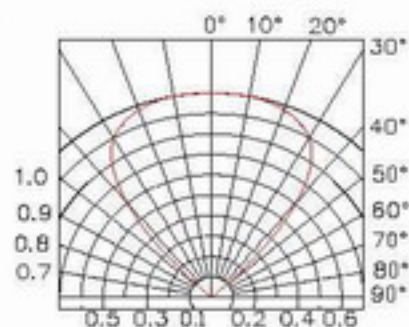
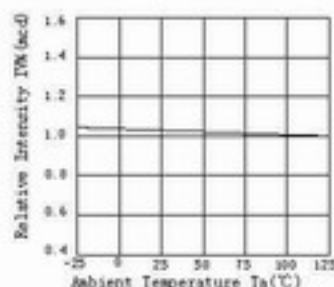
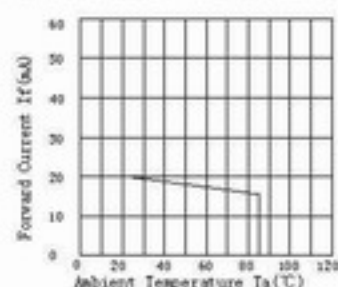
■ Reliability Performance

Test Items And Result

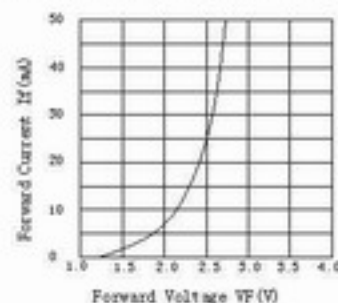
Test Classification	Test Item	Test Conditions	Test Duration	Sample Size	AC/RE
Life Test	Room Temperature DC Operating Life Test	Ta=25°C±5°C, IF=20mA	1000hrs	22 pcs	0/1
Environment Test	Thermal Shock Test	-10°C±5°C←→+100°C±5°C 5min. 10sec. 5min.	50 cycles	22 pcs	0/1
	Temperature Cycle Test	-40°C±5°C←→+85°C±5°C 30min. 5min. 30min.	50 cycles	22 pcs	0/1
	High Temperature & High Humidity Test	Ta=85°C±5°C RH =85%±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

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

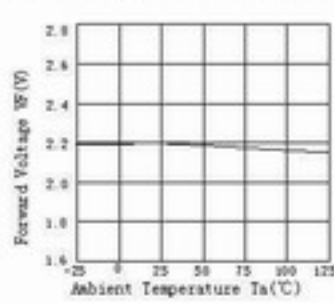
Forward Current vs. Ambient Temperature Relative Intensity vs. Ambient Temperature



Forward Current vs. Forward Voltage



Forward Voltage vs. Ambient Temperature



Luminous Spectrum (Ta=25°C) SPECTRAL RADIANCE

