



◆ Features

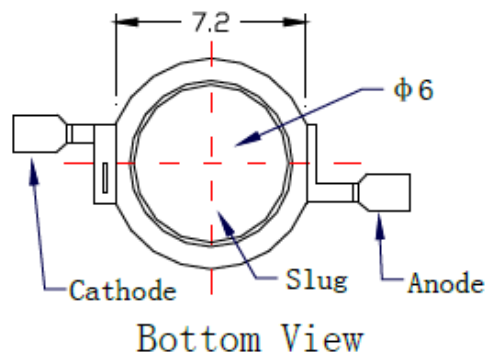
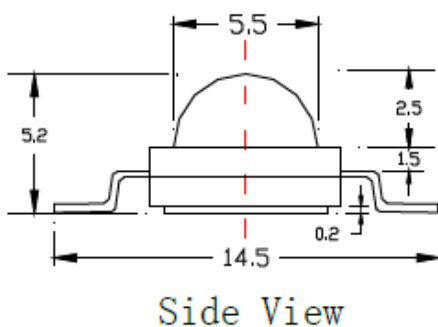
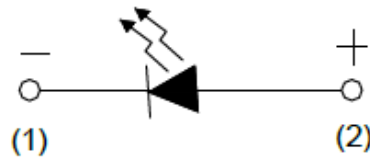
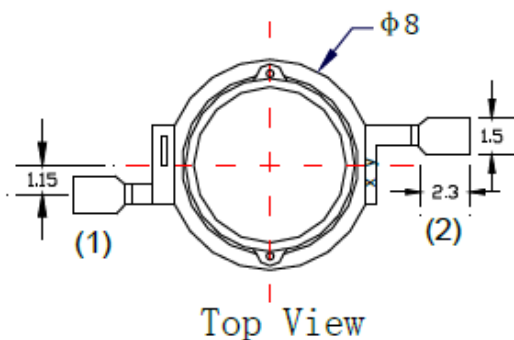
- * Small package with high efficiency
- * Designed for high current operation
- * Low voltage operation, Instant light, Long operation life
- * Lead free product
- * RoHS compliant

◆ Applications:

- * Mobile phone flash
- * Automotive interior/Exterior lighting
- * Automotive forward lighting
- * Architectural lighting
- * LCD TV / Monitor backlight
- * Projector light source
- * Traffic signals
- * Task lighting
- * Decorative/ Pathway lighting
- * Remote / Solar powered lighting
- * Household appliances



◆ Package Dimensions



Notes:

1. All dimensions are in mm,
2. Tolerance is $\pm 0.3\text{mm}$ unless otherwise noted.

◆ Absolute Maximum Ratings (T_A=25℃)

Parameter	Symbol	Unit	Unit
Power Dissipation (功耗)	P _D	1000	mW
Forward Current (正向电流)	I _F	350	mA
Peak Forward Current* (脉冲峰值电流)	I _{FP}	500	mA
Junction temperature (有限最高结温)	T _j	120	℃
Operation Temperature Range (工作温度)	T _{opr}	-30 to +80	℃
Storage Temperature Range (贮藏温度)	T _{stg}	-40 to +80	℃
Thermal resistance (有效热阻参考)	R _{J-B}	8	℃/W
ESD Sensitivity (HBM) (抗静电级别)	--	2000	V
Hand Soldering Temperature (手工焊接温度)	350±20℃/3~5sec		

NOTE: * Pulse width≤0.1msec Duty Ratio ≤1/10

◆ Electrical-Optical Characteristics (T_A=25℃)

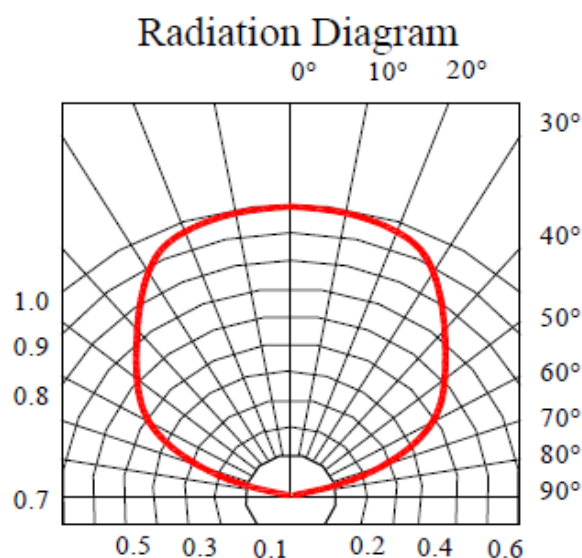
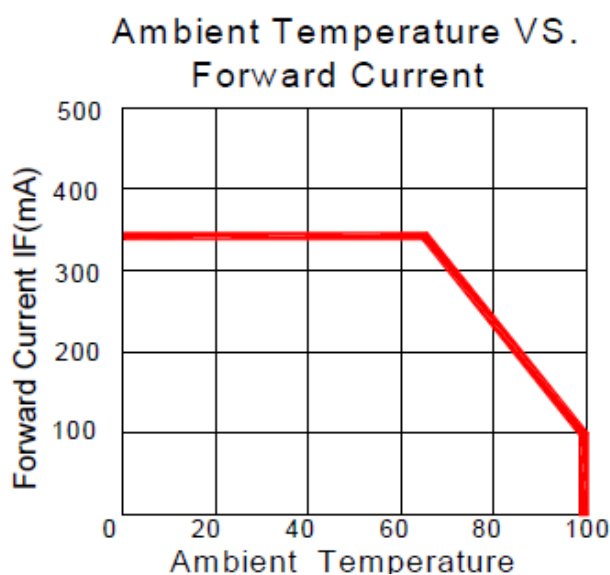
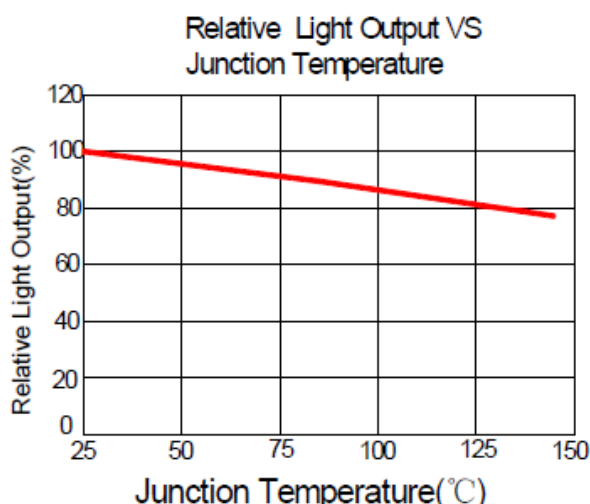
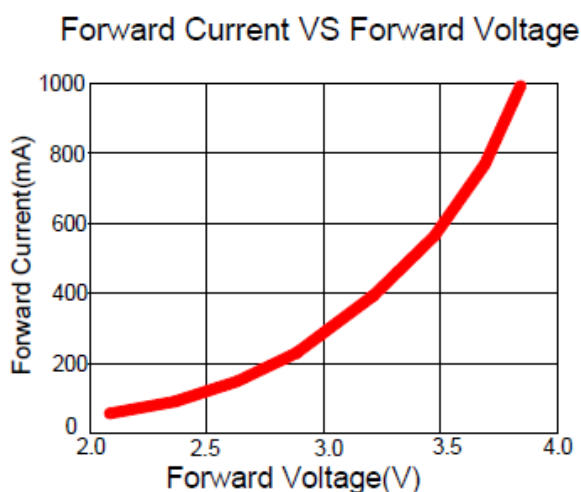
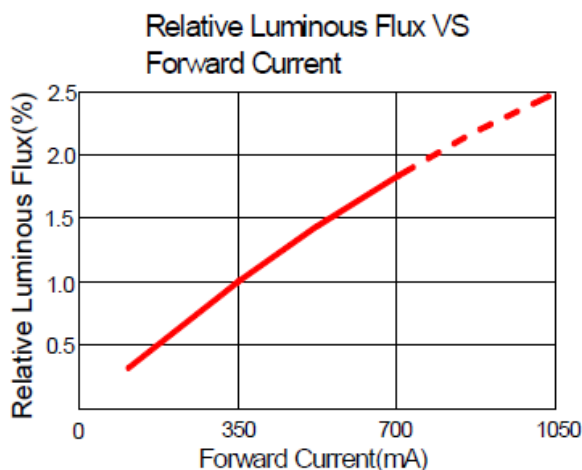
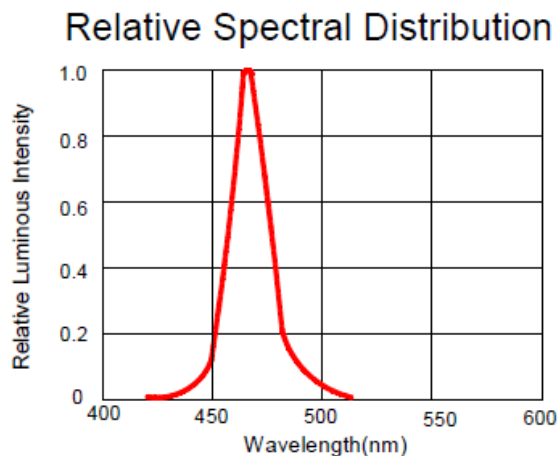
Parameter	Test Condition	Symbol	Min	Typ	Max	Unit
Forward Voltage	I _F =350mA	V _F	3.1	--	3.4	V
Reverse Current	V _R =-5V	I _R	--	--	5	μA
View Angle	--	2θ 1/2	--	140	--	deg.
Luminous flux	I _F =350mA	Φ	15	--	20	lm
Chromaticity	I _F =350mA	λ d	460	--	465	nm

Note:

- 1.Tolerance of measurement of luminous flux ±10%
- 2.Tolerance of measurement of CCT ±5%
- 3.Tolerance of measurement of chromatic coordinates ±0.005
- 4.Tolerance of measurement of forward voltage ±0.05V



◆ Typical Electrical/Optical Characteristic Curves ($I_f=350\text{mA}$; $T_A=25^\circ\text{C}$)





◆ Reliability

1. Test Items And Results

Item	Standard Test Method	Test conditions	Note	Number of Damaged
Resistance to Soldering Heat	JEITA ED-4701 300 302	$T_{SLD}: 160^{\circ}\text{C} \pm 5^{\circ}\text{C}$ 10sec	1 time	0/30
Solder ability	JEITA ED-4701 300 303	$TSLD = 150 \pm 5^{\circ}\text{C}$, 5Sec	1time	0/30
Thermal Shock	JEITA ED-4701 300 307	$-40-100^{\circ}\text{C}$ 10min, 10min	100cycles	0/30
Temperature Cycle	JEITA ED-4701 100 105	$-40^{\circ}\text{C} \sim 25^{\circ}\text{C} \sim 100^{\circ}\text{C} \sim 25^{\circ}\text{C}$ 30min. 5min. 30min. 5min	160cycles	0/30
Terminal Strength (Pull test)	JEITA ED-4701 400 401	Load 10N(1kgf) $10 \pm 1\text{sec}$	None Damage	0/30
Terminal Strength (bending test)	JEITA ED-4701 400 401	Load 5N(0.5kgf) $0^{\circ} \sim 90^{\circ} \sim 0^{\circ}$ bend 2 times	None Damage	0/30
Temperature Humidity Storage	JEITA ED-4701 100 103	$T_a = 60^{\circ}\text{C}$, RH=90%	1000hrs	0/30
Steady State Operating life	—	$T_a = 25^{\circ}\text{C}$, $I_F = 350\text{mA}$	1000hrs	0/30
Steady State Operating life of High Humidity Heat	—	$T_a = 60^{\circ}\text{C}$ RH=90%, $I_F = 350\text{mA}$	1000hrs	0/30
High Temperature Storage	JEITA ED-4701 200 201	$T_a = 100^{\circ}\text{C}$	1000HRS	0/30
Low Temperature Storage	JEITA ED-4701 200 202	$T_a = -40^{\circ}\text{C}$	1000HRS	0/30

2. Criteria for Judging The Damage

Item	Symbol	Test Conditions	Criteria for Judgment	
			Min.	Max.
Forward Voltage	V_F	$I_F = 350\text{mA}$	—	Initial Data $\times 1.1$
Luminous Intensity	I_V	$I_F = 350\text{mA}$	Initial Data $\times 0.9$	—
Reverse Current	I_R	$V_R = 5\text{V}$	—	$\leq 5\mu\text{A}$