

◆ Features

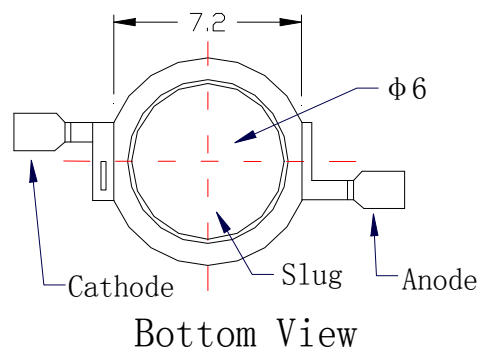
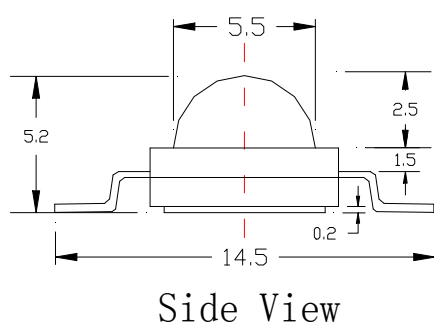
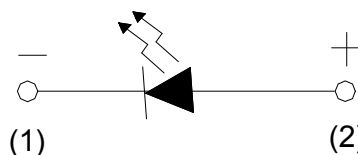
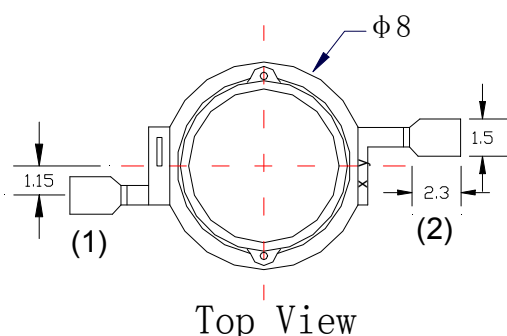
- * Small package with high efficiency
- * Designed for high current operation
- * Low voltage operation, Instant light, Long operation life
- * Lead free product
- * RoHS compliant



◆ 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 ± 0.3 mm unless otherwise noted.

◆ Absolute Maximum Ratings (T_A=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation (功耗)	P _D	1	W
Forward Current (正向电流)	I _F	350	mA
Peak Forward Current* (脉冲峰值电流)	I _{FP}	700	mA
Junction temperature (有限最高结温)	T _j	120	°C
Operation Temperature Range (工作温度)	T _{opr}	-30 to +80	°C
Storage Temperature Range (贮藏温度)	T _{stg}	-40 to +80	°C
Thermal resistance (有效热阻参考)	R _{J-B}	8	°C/W
ESD Sensitivity (HBM) (抗静电级别)	--	2000	V
Hand Soldering Temperature (手工焊接温度)	350 ± 20°C/3~5sec		
Reflow Temperature Range(回流焊最高温度区)	200°C/40sec		

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

◆ Electrical-Optical Characteristics (T_A=25°C)

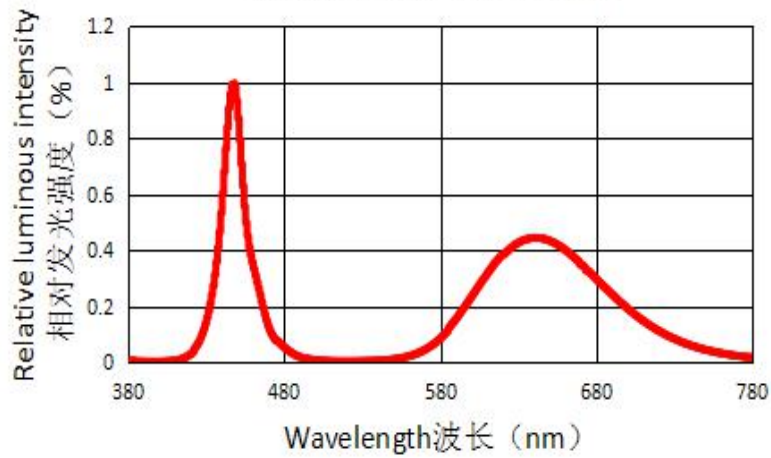
Parameter	Test Condition	Symbol	Min	Typ	Max	Unit
Forward Voltage	I _F =350mA	V_F	3.0		3.6	V
Reverse Current	V _R =-5V	I_R			5	μA
View Angle	--	2Θ 1/2		140		deg.
Luminous flux	I _F =350mA	Φ_v	40		60	lm
Color Coordinates 色度坐标	I _F =350mA	X	---	0.35	---	
		Y	---	0.16	---	

Note:

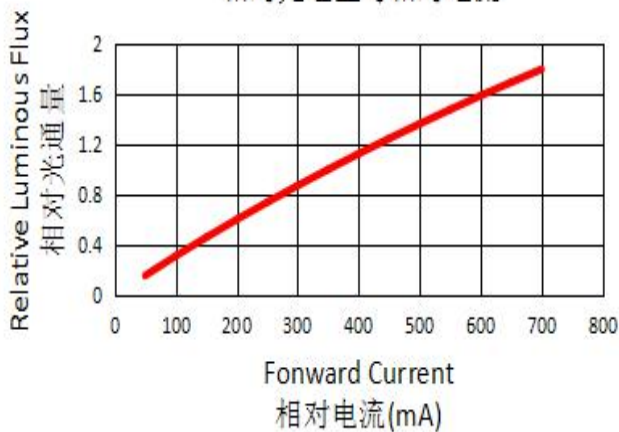
1.Tolerance of measurement of luminous flux	±10%
2.Tolerance of measurement of CCT	±5%
3.Tolerance of measurement of chromatic coordinates	±0.005
4.Tolerance of measurement of forward voltage	±0.05V

◆ Typical Electrical/Optical Characteristic Curves (If=350mA; T_A=25°C)

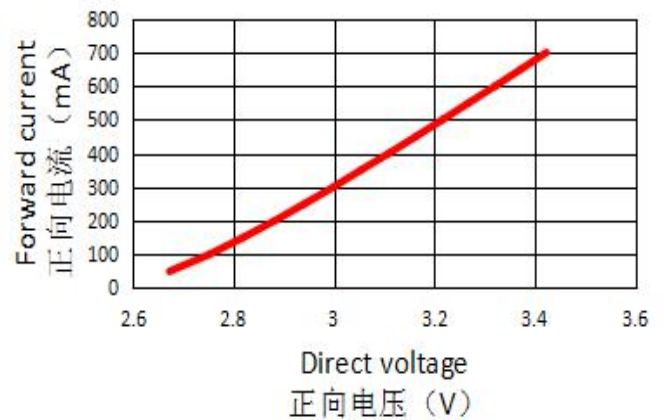
Relative luminous intensity and wavelength band
相对发光强度与波段 (nm)



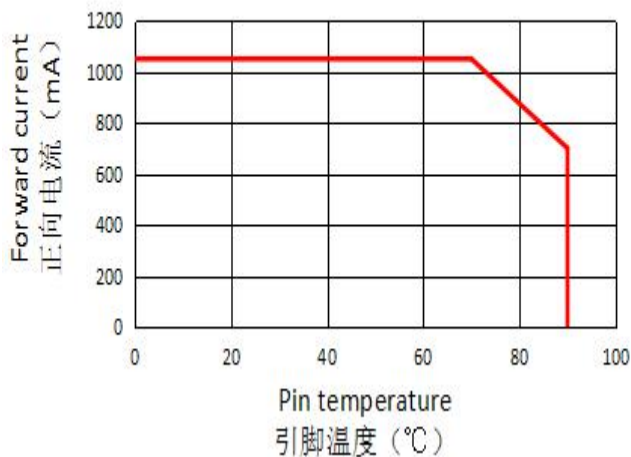
Relative Luminous Flux VS Forward Current
相对光通量与相对电流



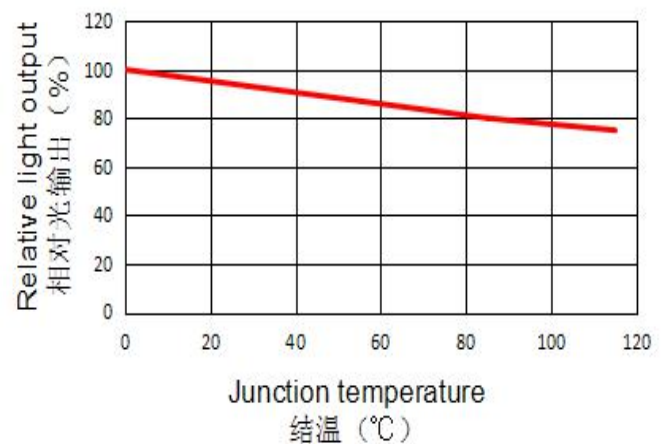
Forward current and direct voltage
正向电流与正向电压



Forward current and pin temperature
正向电流与引脚温度



Relative light output and junction temperature
相对光输出与结温



◆ Reliability

1. Test Items And Results

Item	Test conditions	Note	Number of Damaged
Solder ability	200℃,40Sec	2time	0/22
Thermal Shock	-40-110℃ 30min,10s, 30min	200cycles	0/22
Terminal Strength (Pull test)	10N(1kgf)/10±1sec	None Damage	0/22
Temperature Humidity Storage	Ta=85℃,RH=85%	1000hrs	0/22
Steady State Operating life	Ta=25℃,IF=350mA	1000hrs	0/22
Steady State Operating life of High Humidity Heat	Ta=85℃ RH=85%,IF=350mA	300hrs	0/22
High Temperature Storage	Ta=100℃	1000HRS	0/22
Low Temperature Storage	Ta=-40℃	1000HRS	0/22

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	$V_R = 5V$	---	$\leq 10\mu A$