Мощный светодиод
ARPL-1W-EPL38 IR940

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

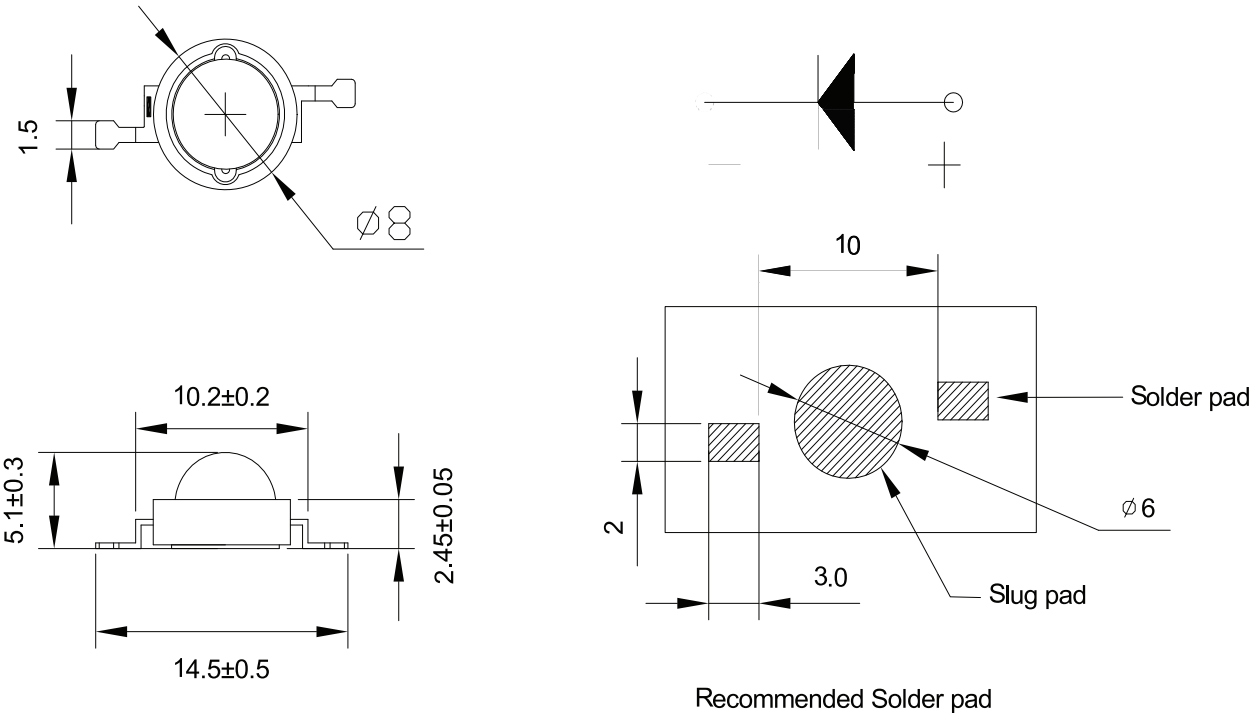
Features

- Highest flux per LED family in the world
- Very long operating life (up to 100k hours)
- Lambertian radiation pattern
- Low voltage DC operated
- Cool beam, safe to the touch
- Fully dimmable
- No UV
- Superior ESD protection
- lower R_{th}
- RoHS compliant—lead-free
- Instant light (less than 100ns)

Applications

- Portable (flashlight, bicycle)
- Reading lights (car, bus, aircraft)
- Orientation
- Mini-accent
- Decorative
- Fiber optic alternative
- Appliance
- Sign and channel letter
- Architectural detail
- Cove lighting
- Automotive exterior (Stop-Tail-turn, CHMSL, Mirror side repeat)
- Edge-lit signs(Exit, point of sale)

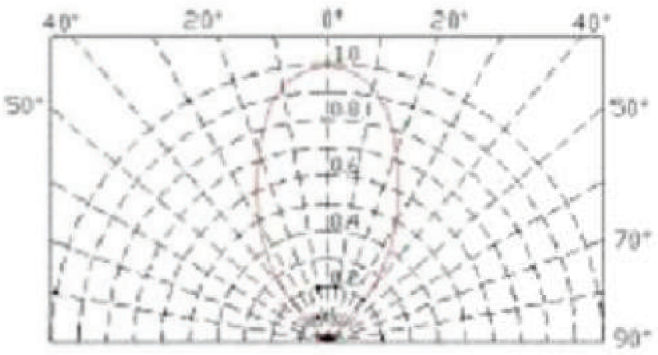
■ Package Dimensions



Notes:

All dimensions in mm tolerance is ±0.1mm unless otherwise noted.

■ Radiation Pattern



■Absolute Maximum Ratings (T_a = 25°C)

Itemsa	Symbol	Absolute maximum Rating	Unit
DC Forward Current	I_F	700	mA
Peak Forward Current*	I_{FP}	700	mA
Power Dissipation	P_D	1	W
Reverse Voltage	V_R	5	V
LED Junction Temperature	T_J	125	°C
Operation Temperature	T_{opr}	-30 ~ +75	°C
Storage Temperature	T_{stg}	-40 ~ +85	°C

*pulse width <=0.1msec duty <=1/10

■Typical Electrical & Optical Characteristics (Ta = 25°C)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F =350mA	1.20	---	1.60	V
Reverse Current	I_R	V_R = 5V	---	---	10	μA
Peak wavelength	λp	I_F =350mA	930	---	940	nm
Radiant Flux	Φe	I_F =350mA	100	---	150	mW
Temperature Coefficient of Forward Voltage	$\Delta V_F/\Delta T$	I_F =350mA	---	-2	---	mV/°C
Viewing Angle[1]	$2\Theta_{1/2}$	I_F =350mA	---	140	---	deg
Thermal Resistance Junction to Board	$R\Theta_{J-B}$	I_F =350mA	---	8	---	°C/W

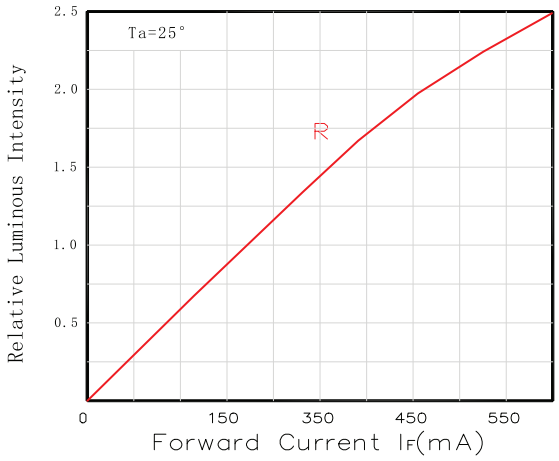
■Important Notes:

1) 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2) The above luminous flux measurement allowance tolerance is ±10%.
3) The above forward voltage measurement allowance tolerance is ±1v
4) The wavelength measurement error shown above is plus or minus 0.1nm.

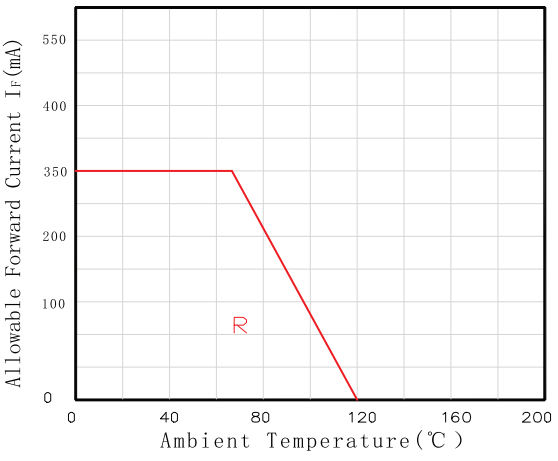
■ Typical Optical/Electrical Characteristics Curve

(Ta=25℃ Unless Otherwise Noted)

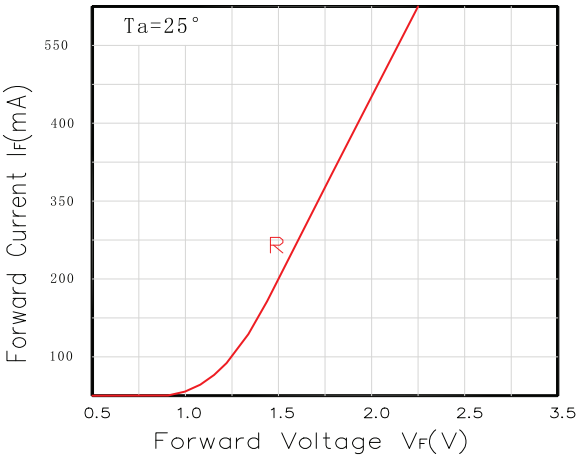
Relative Luminous Intensity - IF



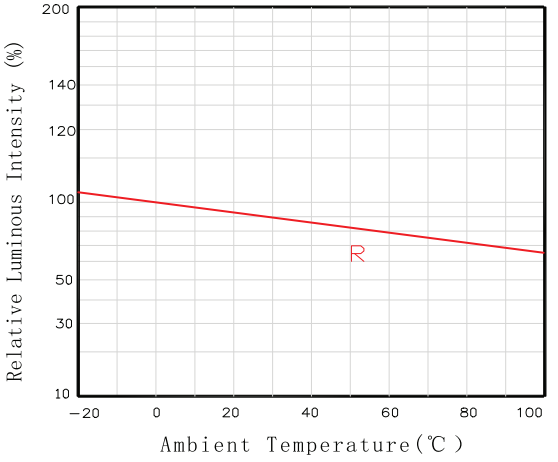
Allowable Forward Current - Ta



IF - VF



Relative Luminous Intensity - Ta



Wavelength Characteristics