

Мощный светодиод ARPL-1W-EPL38 IR940



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



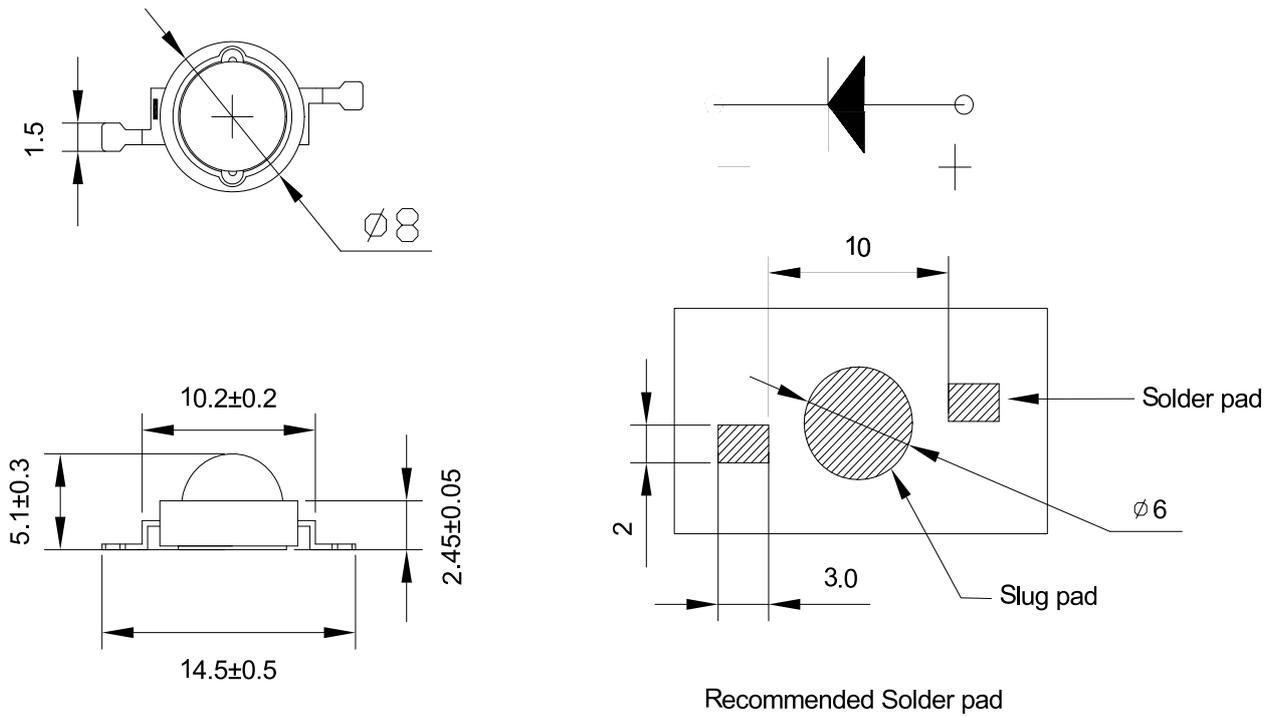
Features

- 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)

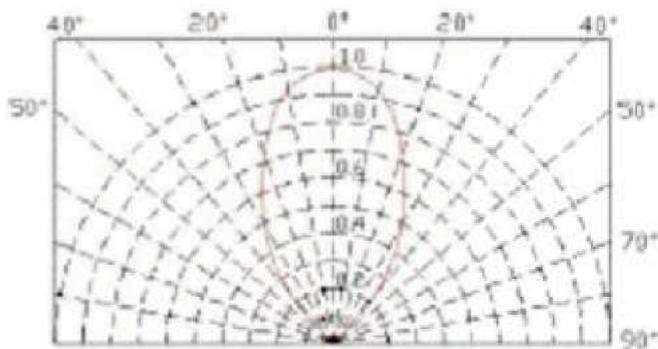
■ Package Dimensions



Notes:

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

■ Radiation Pattern



■ Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Itemsa	Symbol	Absolute maximum Rating	Unit
DC Forward Current	I_F	350	mA
Peak Forward Current*	I_{FP}	700	mA
Power Dissipation	P_D	735	mW
Reverse Voltage	V_R	5	V
LED Junction Temperature	T_J	120	$^\circ\text{C}$
Operation Temperature	T_{opr}	-20 ~ +75	$^\circ\text{C}$
Storage Temperature	T_{stg}	-30 ~ +80	$^\circ\text{C}$
Manual Soldering Temperature	T_{sol}	350 $^\circ\text{C} \pm 10^\circ\text{C}$ For 3~5 Seconds	$^\circ\text{C}$
ESD Sensitivity	ESD	2000	V

*pulse width $\leq 0.1\text{msec}$ duty $\leq 1/10$

■ Typical Electrical & Optical Characteristics ($T_a = 25^\circ\text{C}$)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 350\text{mA}$	2.00		2.40	V
Reverse Current	I_R	$V_R = 5\text{V}$		---	10	μA
Band	λ_d	$I_F = 350\text{mA}$	930		940	nm
Luminous Flux	Φ_v	$I_F = 350\text{mA}$	5		10	lm
Radiant Power	M	$I_F = 350\text{mA}$	60		70	mW
Viewing Angle	$2\theta_{1/2}$	$I_F = 350\text{mA}$	---	120	---	deg
Thermal Resistance (Junction to Board)	R_{J-B}	$I_F = 350\text{mA}$	---	10	---	$^\circ\text{C}/\text{W}$

■ Important Notes:

- 1) All ranks will be included per delivery, rank ratio will be determined by ARL.
- 2) Tolerance of measurement of V_F is $\pm 0.1\text{V}$.
- 3) Tolerance of measurement of the color coordinates X,Y is ± 0.015 .
- 4) Tolerance of measurement of luminous intensity is $\pm 15\%$.
- 5) As we are making continuous efforts to improve the performance of LED, Specifications are subject to change without notice.
- 6) Information is tentative and subject to change without notice.

■ Typical Optical/Electrical Characteristics Curve

(Ta=25°C Unless Otherwise Noted)

