



American Opto Plus

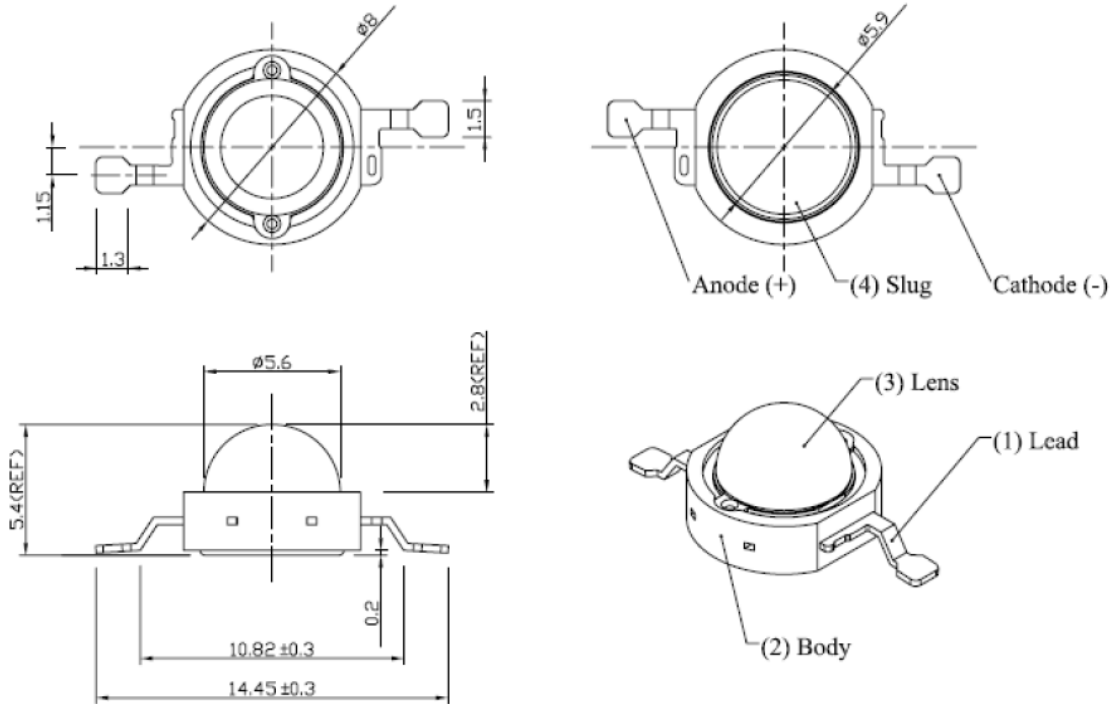
PU-1WRE

1 Watt Red Power LED

- ❖ High Flux Per LED
- ❖ Very Long Operating Life
- ❖ Lambertian or Collimated Radiation Pattern

Package Dimensions

Lambertian



Notes:

1. The anode side of the device is denoted by a hole in the lead frame
2. Electrical insulation between the case and the board is required-slug of device is not electrically neutral. Do not electrically connect either the anode or cathode to the slug
3. Drawing not to scale
4. All dimensions are in millimeters
5. All dimensions without tolerances are for reference only.
6. Specifications are subject to change without notice.

Part Number	Wavelength	Total Included Angle 60.9v	Viewing Angle 2 θ 1/2	Spectral Half-Width (nm)Δλ1/2
PU-1WRE (RED)	660	160°	140°	20



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660nm

Characteristics at $I_F=350\text{mA}$ ($T_a=25^\circ\text{C}$):

Parameter	Symbol	Value			Unit
		Min	Type	Max	
Radiometric Power ⁽¹⁾	$\Phi_V^{(2)}$		6.5		lm
Peak wavelength ⁽³⁾	λ_P	645	660	670	nm
Forward voltage ⁽⁴⁾	V_F	2.0	2.4	2.8	V
Forward current	I_F		0.35		A
Power dissipation	P_D		0.8		W
Junction temperature	T_J		125		Deg.
Operation temperature	T_{OP}	-30~+85			$^\circ\text{C}$
Storage temperature	T_{ST}	-40~+120			$^\circ\text{C}$
ESD sensitivity ⁽⁵⁾		$\pm 20,000$ HBM			V

(1) SSC maintains a tolerance of $\pm 10\%$ on flux and power measurements.

(2) Φ_V is the total radiometric power output as measured with an integrated sphere.

(3) Correlated Color Temperature is derived from the CIE 1931 Chromaticity diagram.

CCT $\pm 5\%$ tester tolerance

(4) A tolerance of $\pm 0.06\text{V}$ on forward voltage measurements

(5) It is included the zener chip to protect the product from ESD. (Request)



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Typical Radiation Pattern
Lambertian

