

# BEELED

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Product Name: 1w 780nm IR LED

Version No.: BLD-HP001IR780-E42

## Product Description:

- 1 watt High Power LED
- Colloid Color: Transparent
- Emission Color: Red
- Viewing Angle: 120°

Dice Material: GaInN

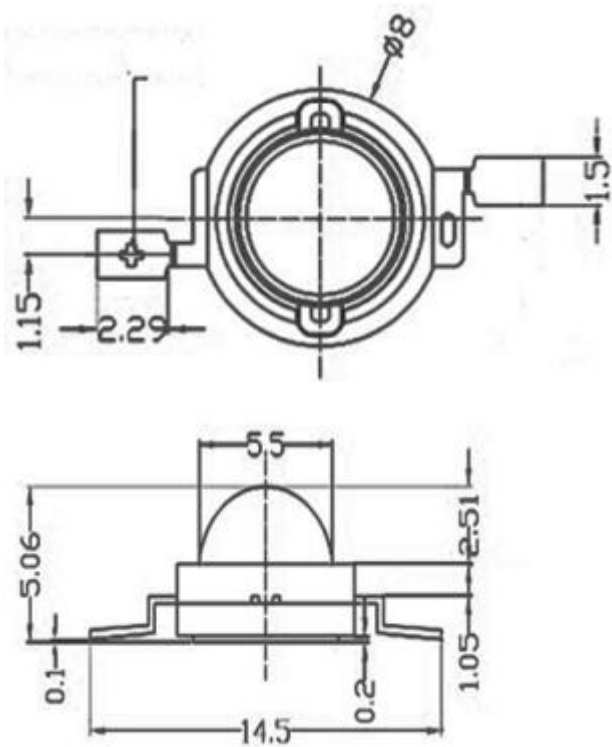


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## Outline Drawing



## Notes:

1. All dimensions are in mm tolerance is  $\pm 0.25$ mm unless otherwise noted.
2. An epoxy meniscus may extend about 1.2mm down the leads.
3. Burr around bottom of epoxy may be 0.5mm max.



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### Absolute Maximum Ratings (Ta = 25°C)

Items	Symbol	Maximum	Units
DC Forward Current	I <sub>F</sub>	350	mA
Peak forward current	I <sub>FP</sub>	500	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power consumption	P <sub>D</sub>	1	W
Operation Temperature	T <sub>opr</sub>	-20~+75	°C
Storage Temperature	T <sub>stg</sub>	-30~+80	°C
Lead Soldering Temperature	T <sub>sol</sub>	Max 260°C for 5 sec Max. (3mm from the base of the body )	

\* Pulse width ≤ 0.1msec duty ≤ 1/10

### Product Optical Properties (Ta = 25°C)

Item	Symbol	Conditions	Min	Averag	Max	Units
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 350mA	1.5	<sup>e</sup> ----	1.8	V
	V <sub>F</sub>	I <sub>F</sub> = 400mA	1.5	----	1.8	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 5V	---	-----	10	μA
Peak Wavelength	λ <sub>p</sub>	I <sub>F</sub> = 350mA	780	-----	785	nm
Chromaticity Coordinates	X	I <sub>F</sub> = 350mA	-----	-----	---	----
	Y	I <sub>F</sub> = 350mA	-----	-----	----	----
Luminous Flux	I <sub>v</sub>	I <sub>F</sub> = 350mA	1	----	2	lm
50% power Angle	2 θ <sup>1/2</sup> H-H	I <sub>F</sub> = 350mA	---	60	---	deg
	2 θ <sup>1/2</sup> V-V	I <sub>F</sub> = 350mA	----	---	---	deg



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### Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
		Infrared	
DC Forward Current(mA)	If	350	mA
Peak Pulse Current(mA)	If	500	mA
Reverse Voltage	VR	5	V
LED Junction Temperature	Tj	125	°C
Operation Temperature	Topr	-20--65	°C
Storage Temperature	Tstg	-20--70	°C
Soldening Temperature	Tsol	260	°C
ESD Sensitivity	Vb	4000	V