

BEELED

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Product Type: BLD-HP100IR800-E42

Version No.: 01

Product Description:

- 100W high power led
- Colloid Color: Transparent
- Emission Color: Infrared
- Viewing Angle:140°

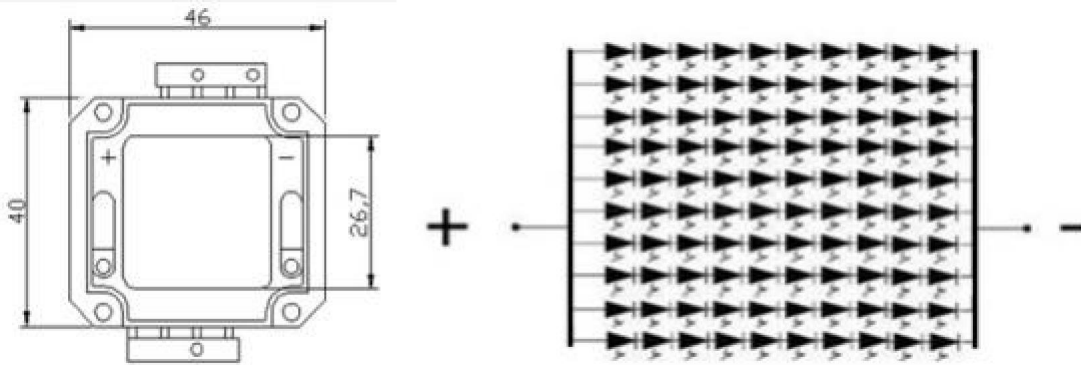
Dice Material: InGaN



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Outline Drawing



Notes:

1. All dimensions area in mm tolerance is ± 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.

Absolute Maximum Ratings (Ta = 25°C)

Items	Symbol	Maximum	Units
DC Forward Current	I_F	3500	mA
Peak forward current	I_{FP}	3500	mA
Reverse Voltage	V_R	50	V
Power consumption	P_D	100	W
Operation Temperature	T_{opr}	-20~+75	°C
Storage Temperature	T_{stg}	-30~+80	°C
Lead Soldering Temperature	T_{sol}	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	Avera	Max	Units
Forward Voltage	V_F	$I_F = 3500\text{mA}$	15	---	16	V
Reverse current	I_R	$V_R = 50\text{V}$	---	---	100	μA
Color Temperature	CCT	$I_F = 3500\text{mA}$	---	---	---	K
Peak Wavelength	λ_p	$I_F = 3500\text{mA}$	850	---	855	nm
Luminous Intensity	I_v	$I_F = 3500\text{mA}$	1	---	5	lm
50% power Angle	$2 \theta_{\frac{1}{2}}^{\theta}$ H-H	$I_F = 3500\text{mA}$	---	140	---	deg
	$2 \theta^{1/2} V-V$	$I_F = 3500\text{mA}$	---	---	---	deg



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Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
		Infrared	
DC Forward Current(mA)	If	3500	mA
Peak Pulse Current(mA)	If	3500	mA
Reverse Voltage	VR	50	V
LED Junction Temperature	Tj	125	°C
Operation Temperature	Topr	-40--100	°C
Storage Temperature	Tstg	-40--100	°C
Soldening Temperature	Tsol	260	°C
ESD Sensitivity	Vb	4000	V

Important Notes:

- 1) All ranks will be included per delivery, rank ratio will be determined by HONGKE.
- 2) Tolerance of measurement of luminous intensity is $\pm 15\%$.
- 3) Tolerance of measurement of VF is ± 0.05 V.
- 4) Color Coordinates Measurement allowance is ± 0.015 .
- 5) For reliability test conditions and data, Please refer to “Reliability Test” section on page 7.
- 6) For how to use HONGKE LED product safely, Please refer to “Application Notes” section on page 9 and 10.
- 7) Packaging methods are available to be chosen, please refer to “Packaging” section on page 11 and 12.
- 8) As we are making continuous efforts to improve the performance of LED, Specifications are subject to change without notice.