

LED product specifications

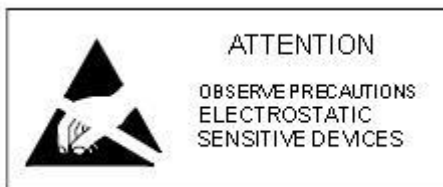
Product Type: 10 watts 830nm IR led

Version No.: 01

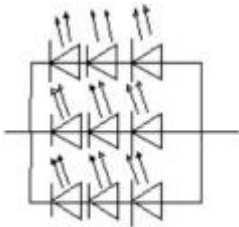
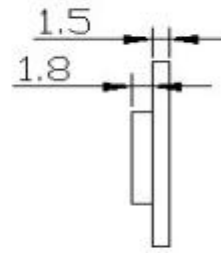
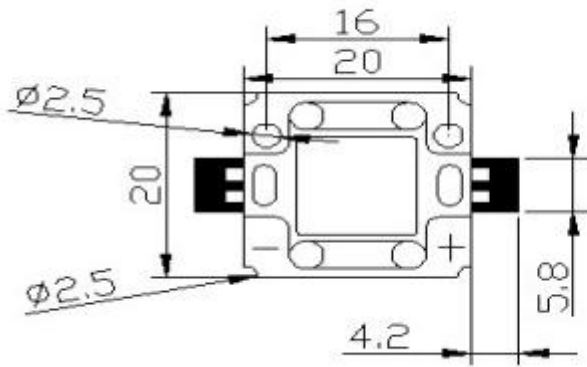
Product Description:

- 10W high power led
- Colloid Color: Transparent
- Emission Color: Infrared
- Viewing Angle:140°

Dice Material: InGaN



Outline Drawing



Notes:

1. All dimensions area in mm tolerance is $\pm 0.25\text{mm}$ 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	900	mA
Peak forward current	I _{FP}	1050	mA
Reverse Voltage	V _R	15	V
Power consumption	P _D	10	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 = 900mA	4.5	---	4.8	V
Reverse current	I _R	V _R = 15V	---	---	30	μA
Color Temperature	CCT	I _F = 900mA	---		---	K
Peak Wavelength	λ _p	I _F = 900mA	825	---	830	nm
Luminous Intensity	I _v	I _F = 900mA	10		20	lm
50% power Angle	$2\theta_{H-H}^{1/2}$	I _F = 900mA	---	140	---	deg
	$2\theta_{V-V}^{1/2}$	I _F = 900mA		---	---	deg

Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
		Infrared	
DC Forward Current(mA)	If	900	mA
Peak Pulse Current(mA)	If	1050	mA
Reverse Voltage	VR	15	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.