

## LED product specifications

Product Type: 10 watts 780nm IR led

Version No.: 01

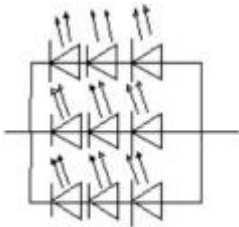
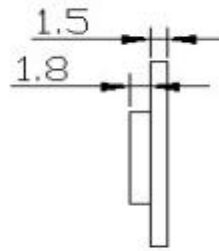
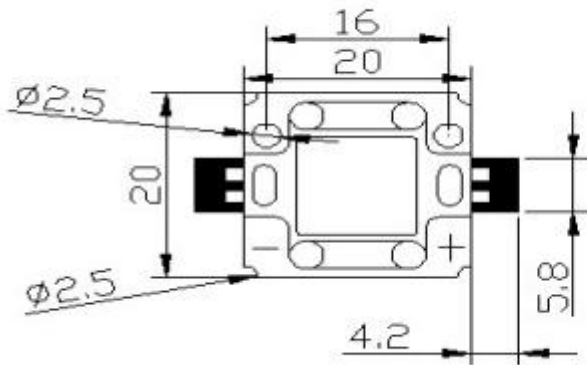
### Product Description:

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

Dice Material: InGaN



## Outline Drawing



## Notes:

1. All dimensions area 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.

Factory address:

No.3 Gongye Street, Baihao Industrial District, Houjie Town, Dongguan City, Guangdong Province, China 523957

## Dongguan HongKe Lighting CO.LTD

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### 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  $\leq 0.1\text{msec}$  duty  $\leq 1/10$

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

Item	Symbol	Conditions	Min	Avera	Max	Units
Forward Voltage	$V_F$	$I_F = 900\text{mA}$	5.4	---	5.7	V
Reverse current	$I_R$	$V_R = 15\text{V}$	---	---	30	$\mu\text{A}$
Color Temperature	CCT	$I_F = 900\text{mA}$	---		---	K
Peak Wavelength	$\lambda_p$	$I_F = 900\text{mA}$	780	---	785	nm
Luminous Intensity	$I_v$	$I_F = 900\text{mA}$	30		50	lm
50% power Angle	$2\theta_{H-H}^{1/2}$	$I_F = 900\text{mA}$	---	140	---	deg
	$2\theta_{V-V}^{1/2}$	$I_F = 900\text{mA}$		---	---	deg

## Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
		Red	
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  $\pm 0.05$  V.
- 4) Color Coordinates Measurement allowance is  $\pm 0.015$ .
- 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.