BEELED

СВЕТОДИОДЫ BEELED - ТЕХНИЧЕСКОЕ ОПИСАНИЕ

Product Type：BLD-HP001UV2-E45

Version No.： 01

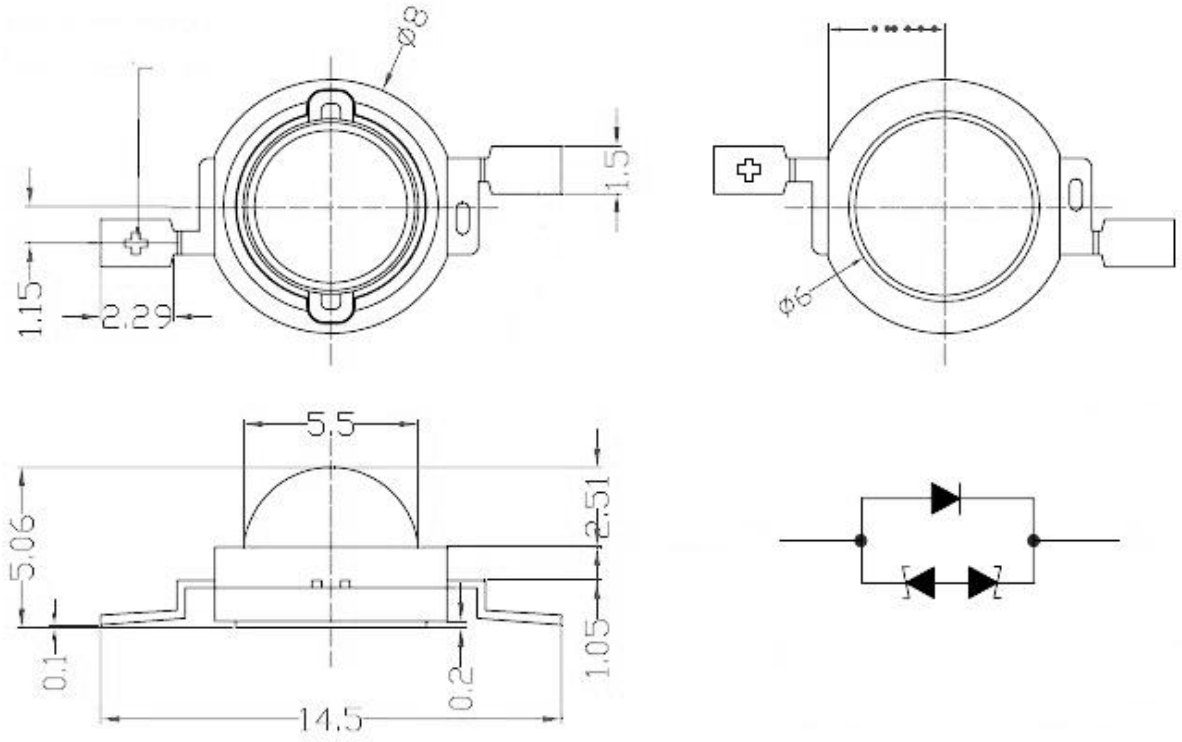
Product Description:

- 1 watt High Power LED
- Colloid Color：Transparent
- Emission Color: UV
- Viewing Angle:140 º

Dice Material：InGaN

RoHS

Outline Drawing



Notes：

1. All dimensions area in mm tolerance is ±0.25mm 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℃）

Items	**Symbol**	**Maximum**	**Units**
DC Forward Current	I_F	600	mA
Peak Forward Current	I_{FP}	1000	mA
Reverse Voltage	V_R	5	V
Power Consumption	P_D	1.0	W
Operation Temperature	T_{opr}	-20～+80	℃
Storage Temperature	T_{stg}	-30～+120	℃
Lead Soldering Temperature	T_{sol}	Max 260℃ for 5 sec Max. (3mm from the base of the body)	

✲Pulse width≤0.1msec　duty≤1/10

Product Optical Properties（Ta = 25℃）

Item	**Symbol**	**Conditions**	**Min**	**Average**	**Max**	**Units**
Forward Voltage	V_F	I_F=350mA	3.0	----	3.3	V
	V_F	I_F=600mA	3.3	----	3.6	V
Reverse Current	I_R	V_R=5V	---	10	---	μA
Wavelength	WL	I_F=350mA	390	-----	395	nm
Chromaticity Coordinates	X	I_F=350mA	-----	-----	---	----
	Y	I_F=350mA	-----	------	----	----
Luminous Flux	I_V	I_F=350mA	10	-----	20	lm
Radiant Flux	I_V	I_F=350mA	250	-----	300	mW/cm2
50% Power Angle	$2\theta^{1/2}$H-H	I_F=350mA	---	140	---	deg
	$2\theta^{1/2}$V-V	I_F=350mA	----	---	---	deg

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 ±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 5.

6) As we are making continuous efforts to improve the performance of LED, Specifications are subject to change without notice.

Reliability Test Standards

Type	Test item	Applicable standard	Test condition	Duration	Sampling number	Accept criteria
environment test	Temperature cycles	JEITA ED-4701 100 105	-40℃～25℃～100℃～25℃ 30min 5min 30min 5min	100cycles	100	0
	Thermal shock	MIL-STD-202G	-40℃～100℃ 15min 15min	300cycles	100	0
	High humidity heat cycles	JEITA ED-4701 200 203	30℃～65℃ RH=90% 24hrs/1 cycle	50cycles	100	0
	High temperature storage	JEITA ED-4701 200 201	T_a=100℃	1000hrs	100	0
	Low temperature storage	JEITA ED-4701 200 202	T_a=-40℃	1000hrs	100	0
	High temperature & high humidity storage	JEITA ED-4701 100 103	T_a=60℃ RH=90%	1000hrs	100	0
life test	Life test		T_a=25℃ If=700mA(R,G,Y)/350mA(W,B)	1000hrs	100	0
	High temperature & high humidity life test		T_a=60℃ RH=90% If=700mA(R,G,Y)/350mA(W,B)	1000hrs	100	0
	Low temperature life test		T_a=-30℃ If=700mA(R,G,Y)/350mA(W,B)	1000hrs	100	0
destructive experiment	Resistance to soldering heat	JEITA ED-4701 300 302	T_{sol}=260℃±5℃,10sec 3mm from the base of the epoxy bulb	one time	20	0
	Solderability	JEITA ED-4701 300 303	T_{sol}=235℃±5℃,5sec using flux	one time	20	0
ESD	Electrostatic discharge test	AEC Q101-001	Human body model 1000V forward and reverse	each 3 times	10	0
physical experiment	Vibration	JEITA ED-4701 400 403	20G 20-2000HZ 4mins X,Y,Z 3directions	each 4cycles	10	0
	Drop	JEITA ED-4701 300 304	75CM	3 times	10	0