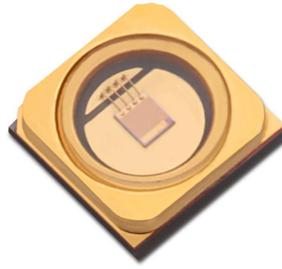


# PRODUCT SPECIFICATION

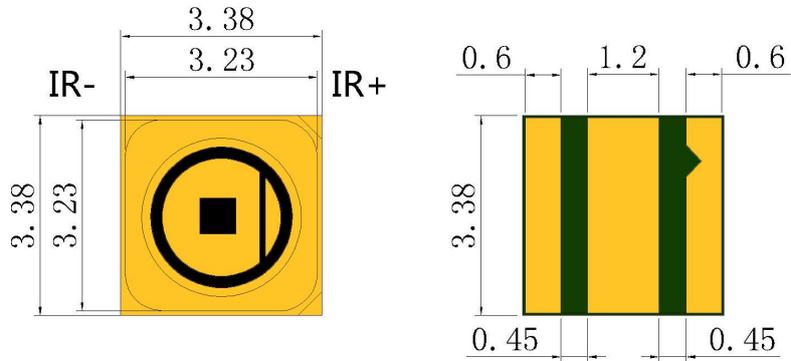


Part No.: WL-3P3535EP22IR-VS-808  
SMD High Power LED

## Catalog

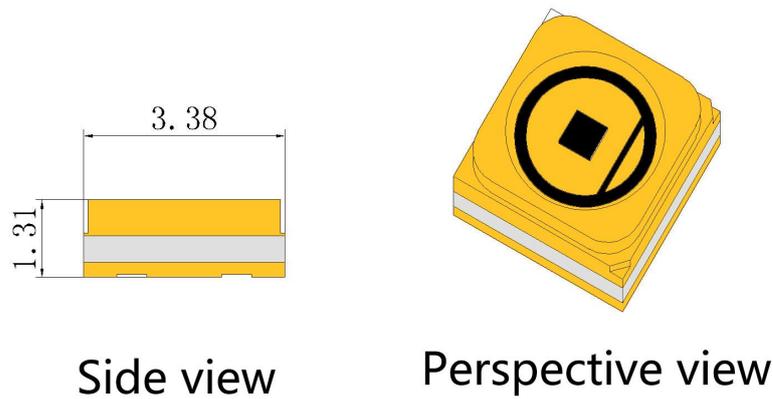
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## 1. Dimensions



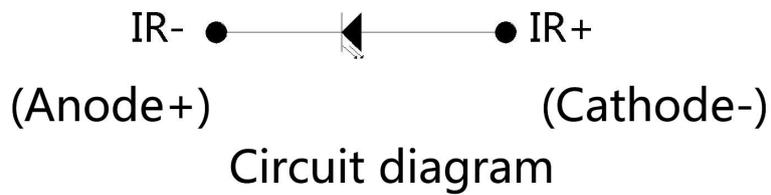
Top view

Bottom view



Side view

Perspective view



Circuit diagram

### Notes:

1. All dimensions are in millimeters.
2. Tolerance is  $\pm 0.1\text{mm}$  unless otherwise noted.

## 2. Electro-optical Characteristics

Parameters	Symbol	Conditions	Specification/Rating			Unit
			Min.	Typ.	Max.	
Threshold current	$I_{th}$	T=25 °C		0.5		A
Operating voltage	$V_{op}$	T=50 °C, $I_{op}$ =3.5A		2.0	2.2	V
Series resistance	$R_s$	T=50 °C, $I_{op}$ =3.5A		0.5		$\Omega$
Slope efficiency	$\eta$	T=50 °C, $I_{op}$ =3.5A	0.9			W/A
Output power	LOP	T=50 °C, $I_{op}$ =3.5A	2.6	3.0		W
Beam divergence	$\theta_{D86}$	T=50 °C, $I_{op}$ =3.5A		25		deg.
Spectral width	$\lambda_{RMS}$	T=50 °C, $I_{op}$ =3.5A	800	808	816	nm
Emission wavelength	$\lambda$	T=25 °C~85°C		0.07		nm/°C
Wavelength shift	$d\lambda/dT$	T=50 °C	37			%
Conversion efficiency	PCE	T=25 °C		0.5		A

Note: The testing condition is 0.3ms-pulse/1%-Duty.

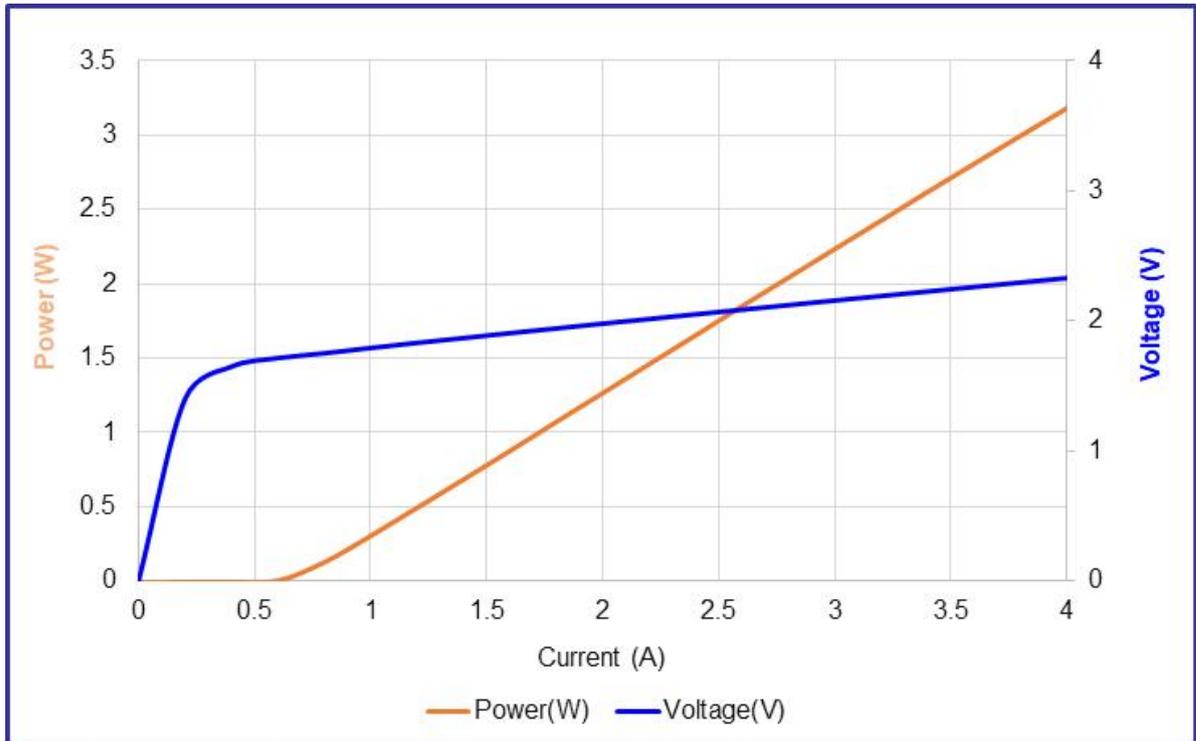
## 3. Absolute Maximum Ratings

Stresses in excess of the absolute maximum ratings can cause permanent damage to the device. These are absolute stress ratings only. Functional operation of the device is not implied at these or any other conditions in excess of those given in the operational sections of the data sheet. Exposure to absolute maximum ratings for extended periods can adversely affect device reliability.

Parameter	Symbol	Min	Max	Unit
Peak forward current	$I_{max}$	-	3.5	A
Optical output power	$P_{max}$	-	7	W
Reverse Voltage	$V_r$	-	5	V
Operating Temperature	$T_{op}$	-	0 to 85	°C
Storage Temperature	$T_{st}$	-	-40 to 100	°C
Mounting Temperature (max. 10 sec)	$T_m$	-	260	°C

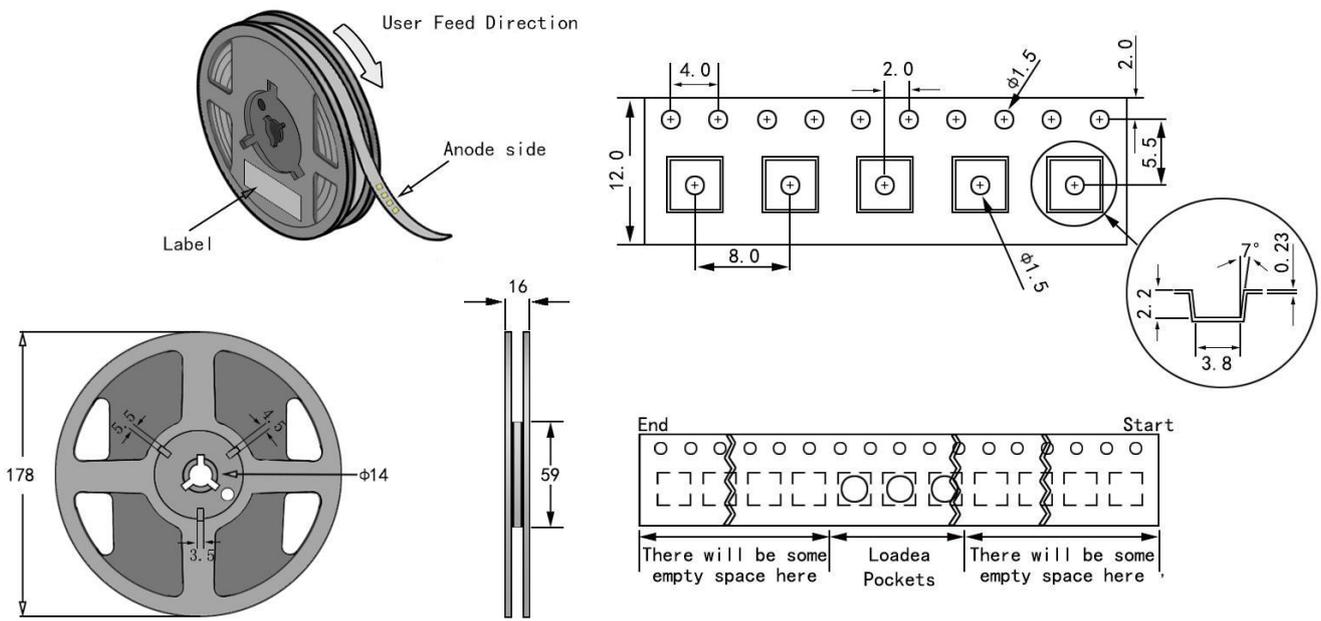
## 4.LIV Characteristics

Typical Performance Curves at 25 °C



## 5. Tape & Reel Packing

1. Recommend unpacked LED beads be welded within one day, if not, please vacuumize again and store in an environment of 20-35°C and 30-60% humidity. If can't vacuumize, please store LED beads in moisture proof box, control at 25°C ± 3°C, humidity 50-60%. If unpacked above 1 week, bake at 60 ± 5°C for 10-12 hours before weld.



### Notes:

1. QTY: 1000pcs/Reel
2. Tolerance ±0.2mm.
3. Package: P/N

## 6.Cautions

### 1. Electrostatic Treatment

Do a full range of anti-static measures (such as: anti-static ring, anti-static clothes, machine, equipment grounding wire, etc.)



### 2. Heat Dissipation

- A、 It is recommend to configure reasonable heat dissipation device for the product.
- B、 The best working temperature range of the product is 40-60°. It is recommended to control the working temperature of the product within a reasonable range.

