



## PRELIMINARY SPEC

### Features

- SUPER HIGH FLUX OUTPUT AND HIGH LUMINANCE.
- DESIGNED FOR HIGH CURRENT OPERATION.
- LOW THERMAL RESISTANCE.
- LOW VOLTAGE DC OPERATED.
- SUPERIOR ESD PROTECTION.
- PACKAGE: 500PCS/REEL.
- NOT REFLOW COMPATIBLE.
- THE COMPONENT IS INTERNALLY PROTECTED WITH SILICONE GEL.
- RoHS COMPLIANT.

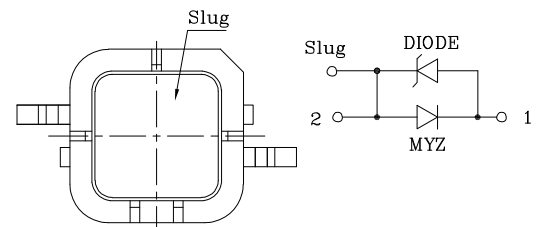
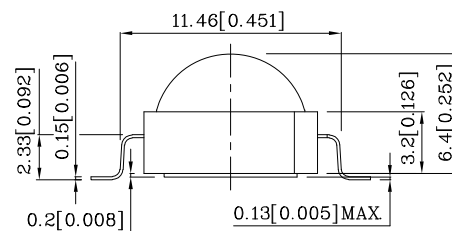
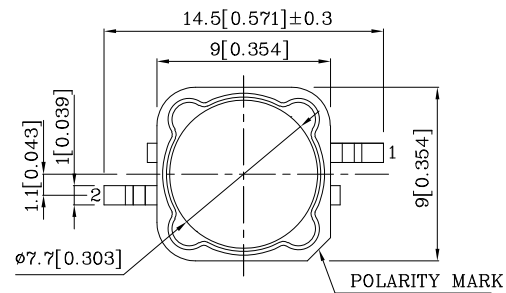


### Outline Drawings



### Applications

- Traffic signaling.
- Backlighting (illuminated advertising , general lighting).
- Interior and exterior automotive lighting.
- Substitution of micro incandescent lamps.
- Portable light source (e.g. bicycle flashlight).
- Signal and symbol luminaire for orientation.
- Marker lights (e.g. steps, exit ways, etc).
- Decorative and entertainment lighting .
- Indoor and outdoor commercial and residential architectural lighting.



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
3. Specifications are subject to change without notice.

### Selection Guide

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=500mA) cd		Viewing Angle 2 θ 1/2 [2]
				min.	typ.	
ZMYZ106W	Yellow	InGaAlP	Water Clear	16	20	100°

### Absolute Maximum Ratings at TA=25°C

Parameter	Symbol	Value	Unit
Power dissipation	Pt	1.28	W
Junction temperature	Tj	110	°C
Operating Temperature	Top	-40 To +100	°C
Storage Temperature	Tstg	-40 To +100	°C
DC Forward Current [1]	IF	500	mA
Peak Forward Current [3]	IFM	700	mA
Thermal resistance [1]	Rth j-slug	12	°C/W
Electrostatic Discharge Threshold (HBM)		8000	V
Iron Soldering [4]		350°C For 3 Seconds	

Notes:

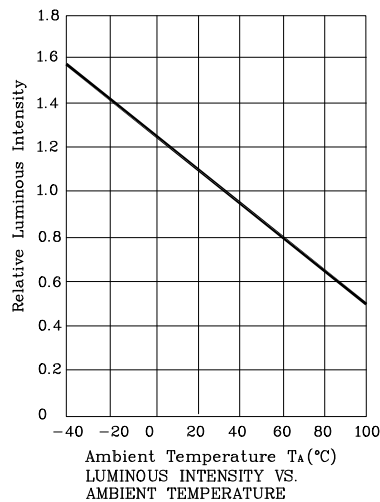
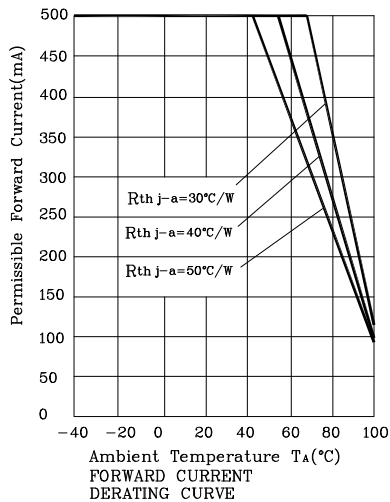
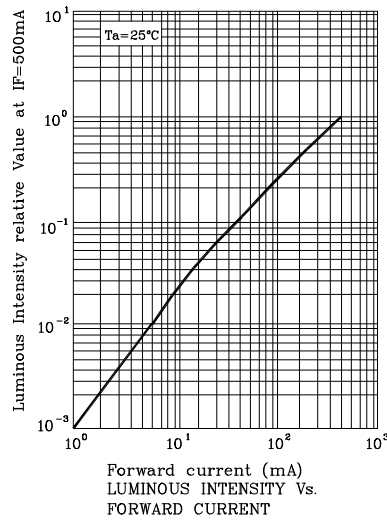
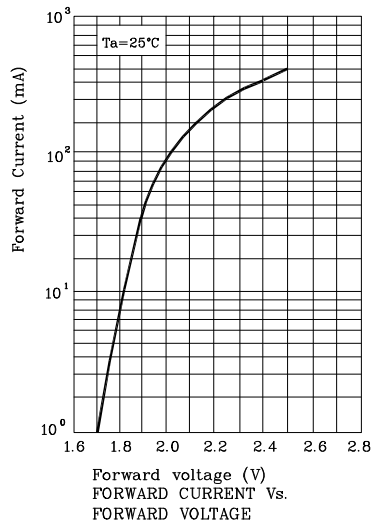
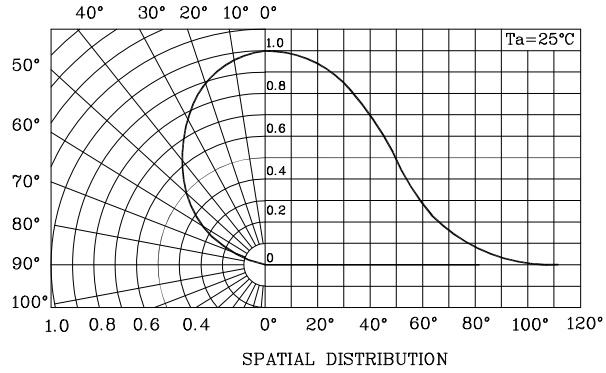
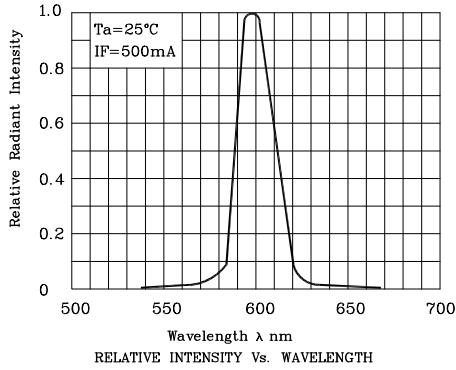
1. Metal Core PCB is mounted on the heat Fins.
2. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
3. 1/10 Duty Cycle, 0.1ms Pulse Width.
4. 1.29mm below package base.

### Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Value	Unit
Wavelength at peak emission IF=500mA [Typ.]	λ peak	598	nm
Dominant Wavelength IF=500mA [Typ.]	λ dom	591	nm
Spectral bandwidth at 50%Φ REL MAX IF=500mA [Typ.]	Δλ	23	nm
Forward Voltage IF=500mA [Min.]	VF	2.0	V
Forward Voltage IF=500mA [Typ.]		2.5	
Forward Voltage IF=500mA [Max.]		3.1	
Temperature coefficient of Ipeak IF=500mA, -10°C ≤ T ≤ 100°C [Typ.]	TC λ peak	0.12	nm/°C
Temperature coefficient of Idom IF=500mA, -10°C ≤ T ≤ 100°C [Typ.]	TC λ dom	0.07	nm/°C
Temperature coefficient of VF IF=500mA, -10°C ≤ T ≤ 100°C [Typ.]	TCv	-2.6	mV/°C



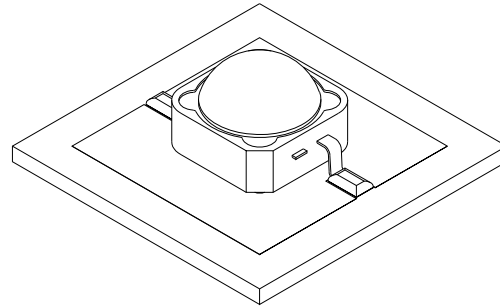
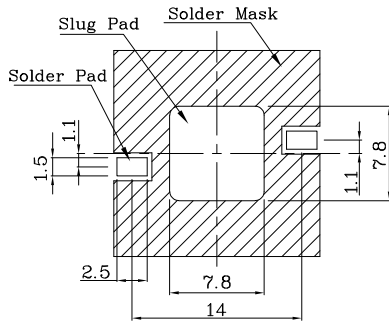
ZMYZ106W



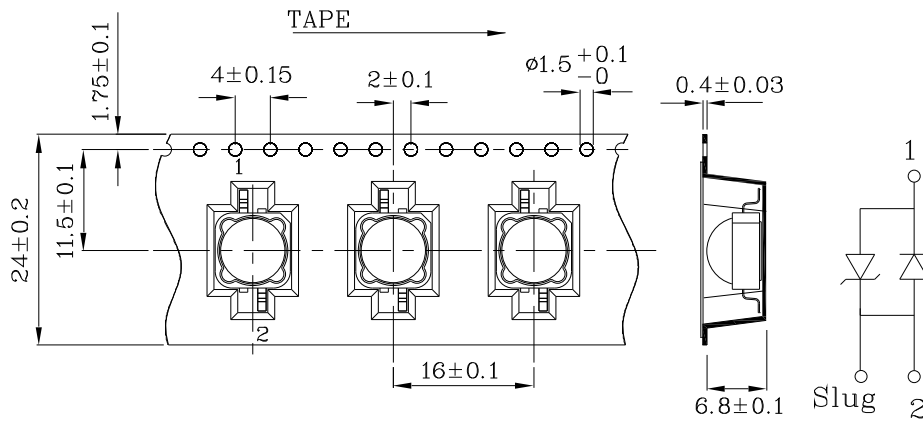


**Recommended Soldering Pattern**  
(Units : mm; Tolerance:  $\pm 0.1$ )

❖ The device has a single mounting surface. The device must be mounted according to the specifications.



❖ **Tape Specification (Units : mm)**



Remarks:

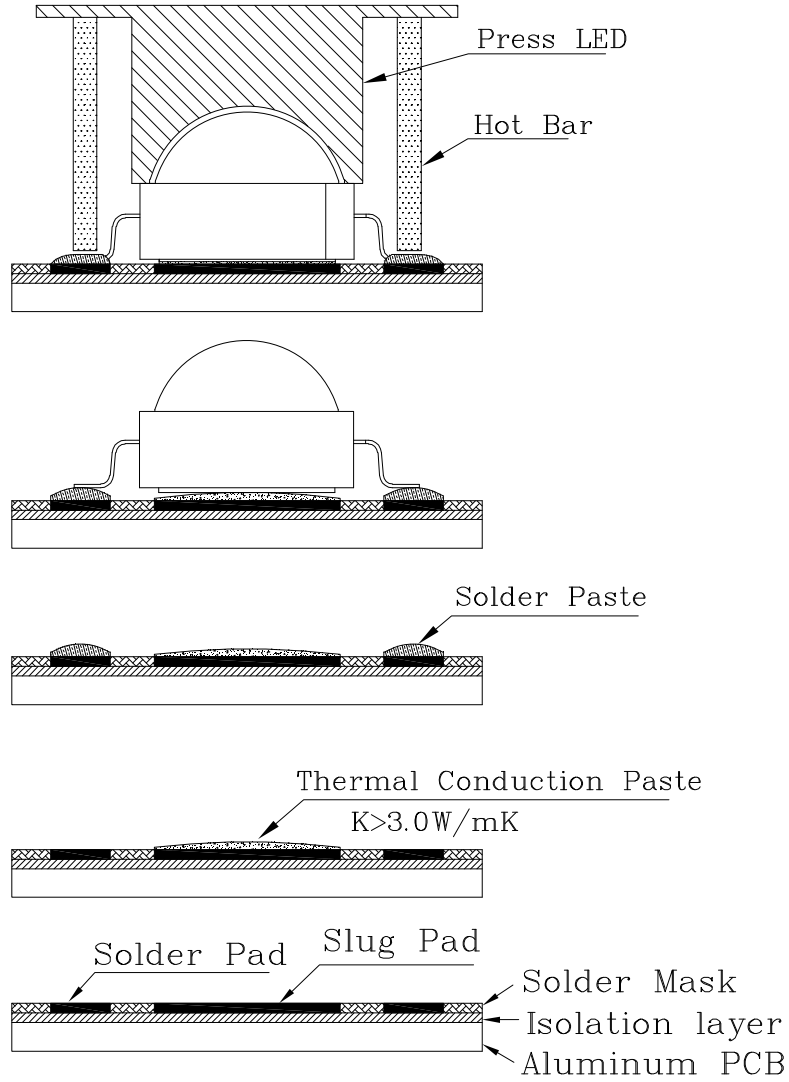
If special sorting is required (e.g. binning based on forward voltage, luminous intensity/ luminous flux or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength:  $\pm 1\text{nm}$
2. Luminous Intensity/ Luminous Flux:  $\pm 15\%$
3. Forward Voltage:  $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.

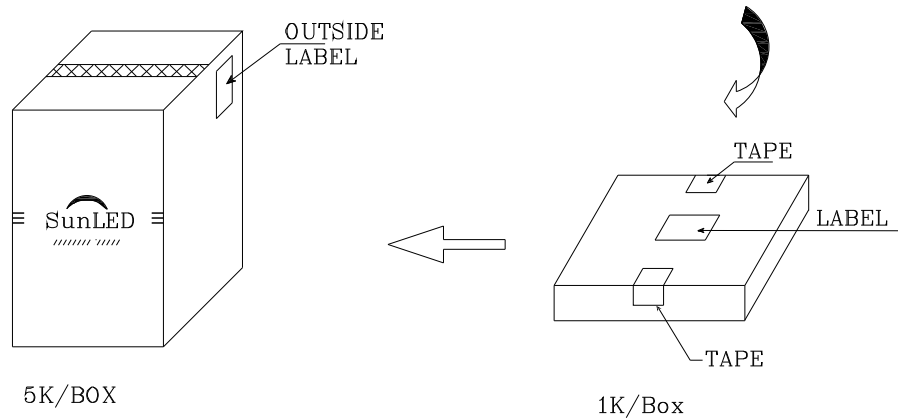
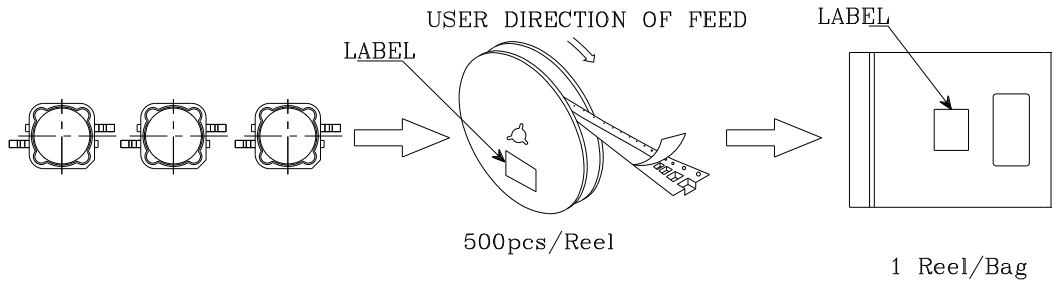



### Recommended Solder Steps



**PACKING & LABEL SPECIFICATIONS**

**ZMYZ106W**


Q.C.	
Q	C
XX	XX. XXXX
PASSED	

P/NO : Zxxx106x

QTY : 500 pcs      CODE: XXX

S/N : XX

LOT NO :



XXXXXXXXXXXXXXXXXXXXXXXXXXXX

RoHS Compliant