

Part Number:

ZMYH106W

APOLLO

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.



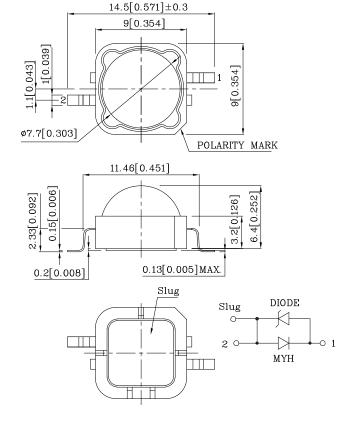


Applications

- 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.



Outline Drawings



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.

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	Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=350mA) cd		Wavelength nm λ P	Viewing Angle 2 θ 1/2 [2]
					min.	typ.		
-	ZMYH106W	Yellow	InGaAlP	Water Clear	8	11.5	590	100°

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Value	Unit	
Power Dissipation	Pt	0.9	W	
Junction temperature	TJ	110	°C	
Operating Temperature	Top -40 To +100 Tstg -40 To +100 IF 350		°C °C mA	
Storage Temperature				
DC Forward Current [1]				
Peak Forward Current [3]	IFM	500	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:

Electrical / Optical Characteristics at Ta=25°C

Parameter	Symbol	Value	Unit	
Wavelength at peak emission IF=350mA [Typ.]	λ peak	590	nm	
Dominate Wavelength IF=350mA [Typ.]	λ dom	588	nm	
Spectral bandwidth at 50%Φ REL MAX IF=350mA [Typ.]	Δλ	20	nm	
Forward Voltage IF=350mA [Min.]		2.0	V	
Forward Voltage IF=350mA [Typ.]	VF	2.5		
Forward Voltage IF=350mA [Max.]		3.0		
Temperature coefficient of lpeak IF=350mA, -10°C≤ T≤100°C [Typ.]	TC λ peak	0.09	nm/°C	
Temperature coefficient of Idom IF=350mA, -10°C≤ T≤100°C [Typ.]	TC λ dom	0.06	nm/°C	
Temperature coefficient of VF IF=350mA, -10°C≤ T≤100°C [Typ.]	TCv	-3.2	mV/°C	

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^{1.}Metal Core PCB is mounted on the heat Fins.

 $^{2.0\,1/2}$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

^{3.1/10} Duty Cycle, $0.1\mathrm{ms}$ Pulse Width.

^{4. 1.29}mm below package base.

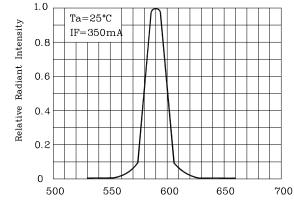


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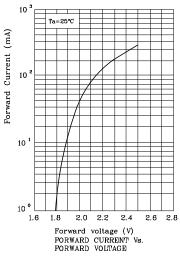
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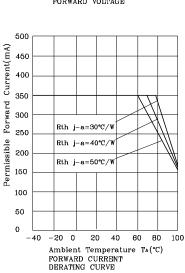
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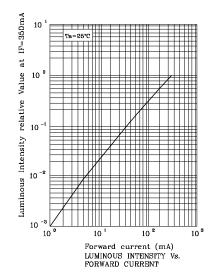


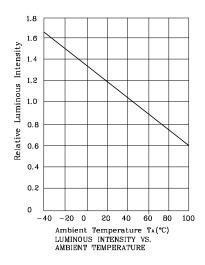
40° 30° 20° 10° 0° Ta=25°C 50° 0.8 60° 0.6 0.4 70° 80° 90° 60° 20° 80° 100° 120° 1.0 0.8 0.6 0.4 0° 40° SPATIAL DISTRIBUTION

 $\label{eq:wavelength} \begin{tabular}{ll} Wavelength λ nm \\ RELATIVE INTENSITY Vs. WAVELENGTH \\ \end{tabular}$









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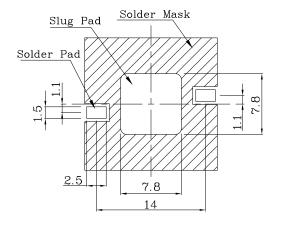
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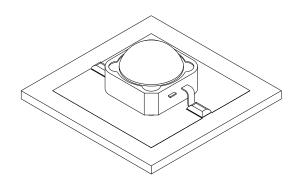
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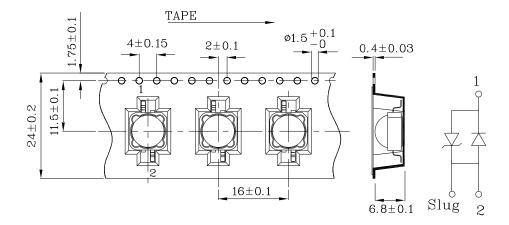
Recommended Soldering Pattern (Units: mm; Tolerance: ±0.1)

❖ 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: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

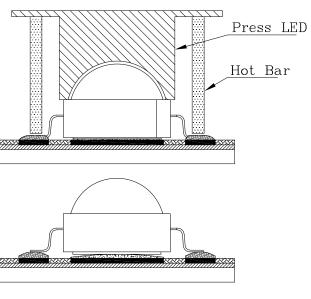
Note: Accuracy may depend on the sorting parameters.

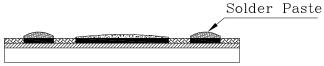
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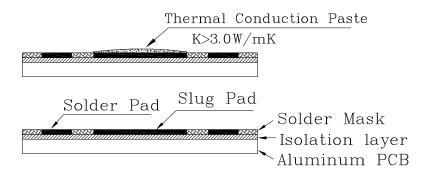




Recommended Solder Steps







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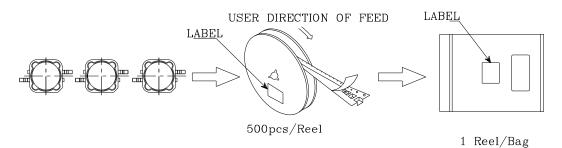


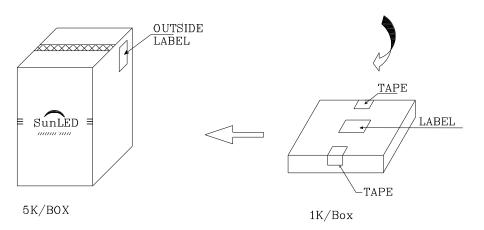


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PACKING & LABEL SPECIFICATIONS ZMYH106W

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P/N0 : Zxxx106x

QTY: 500 pcs

CODE: XXX

S/N : XX

LOT NO :



RoHS Compliant