



PRELIMINARY SPEC

PATENT PENDING

Features

- PLCC-4 PACKAGE.
- SINGLE COLOR.
- HIGH LUMINANCE.
- HIGH POWER, OPERATING CURRENT @ 350MA.
- SUITABLE FOR ALL SMT ASSEMBLY METHODS.
- PACKAGE : 500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

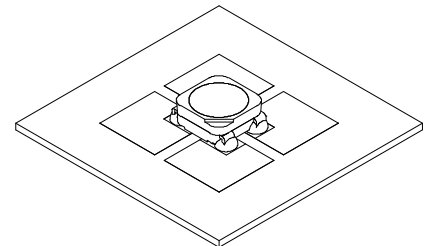
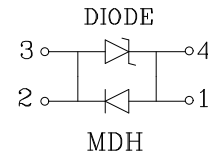
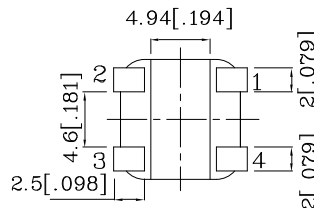
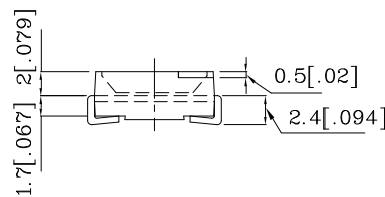
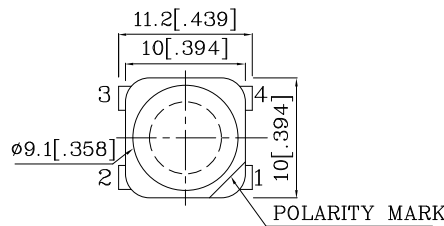


Outline Drawings



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. The device has a single mounting surface. The device must be mounted according to the specifications.
4. Specifications are subject to change without notice.



Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=350mA)[1]		Luminous Flux (IF=350mA)		Wavelength nm λ P	Viewing Angle 2 θ 1/2 [2]
				min.	typ.	min.	typ.		
ZMDH95W	Reddish-Orange	InGaAlP	Water Clear	7.5	10	18	27	640	120°

Absolute Maximum Ratings at TA=25°C

Parameter	Symbol	Value	Unit
Power Dissipation	Pt	1.05	W
Junction Temperature	TJ	110	°C
Operating Temperature	Top	-40 To +85	°C
Storage Temperature	Tstg	-40 To +85	°C
DC Forward Current[1]	IF	350	mA
Peak Forward Current [3]	IFM	500	mA
Thermal Resistance [1]	Rth	60	°C/W

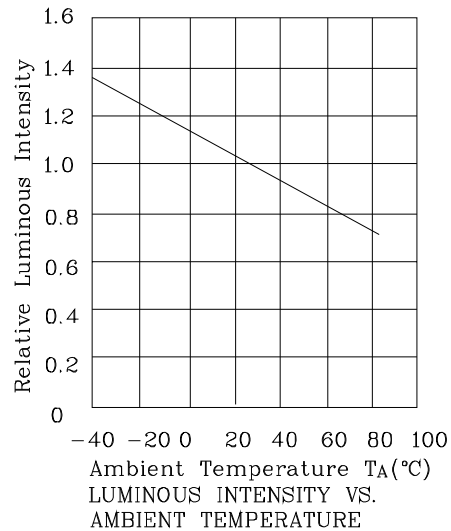
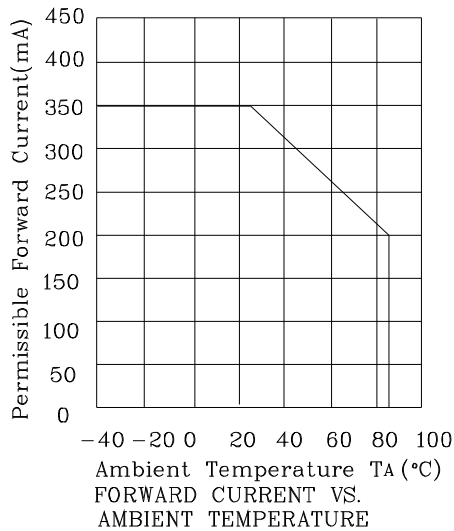
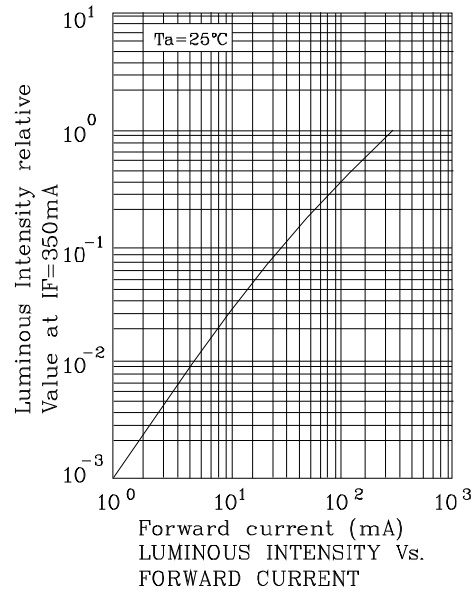
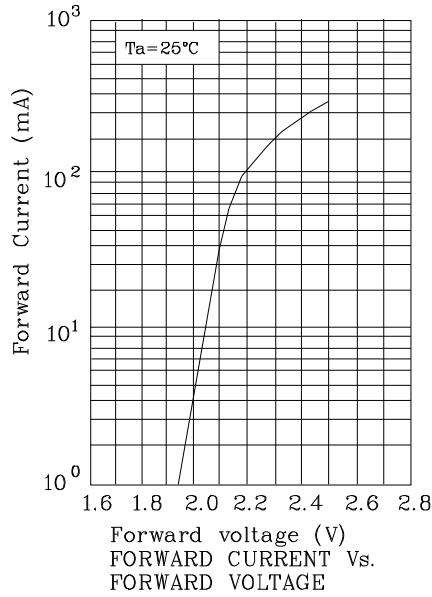
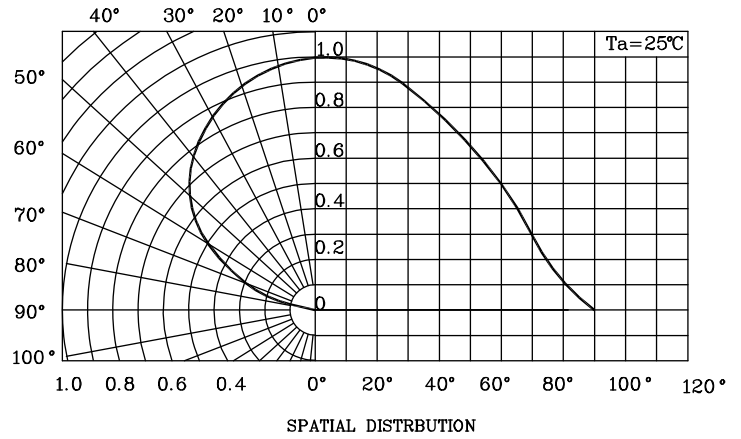
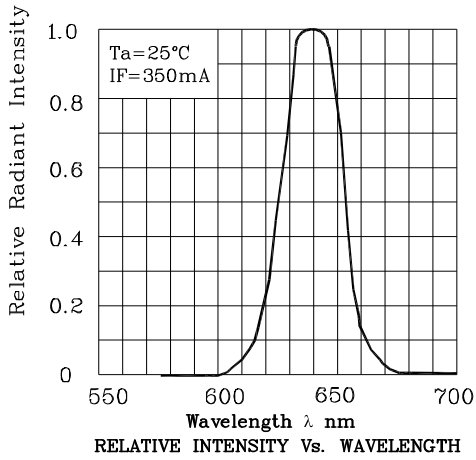
Notes:

- Results from mounting on PC board FR4(pad size ≥ 100mm² per pad), mounted on pc board-metal core PCB is recommend for lowest thermal Resistance.
- 2.0 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
- 1.1/10 Duty Cycle, 0.1ms Pulse Width.

Electrical / Optical Characteristics at TA=25°C

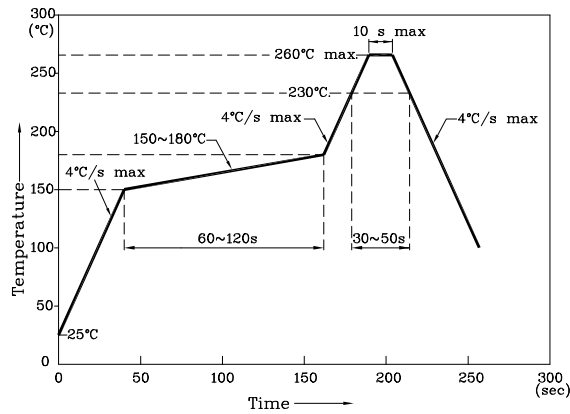
Parameter	Symbol	Value	Unit
Wavelength Of Peak Emission IF=350mA [Typ.]	λ peak	640	nm
Dominant Wavelength IF=350mA [Typ.]	λ dom	625	nm
Spectral Bandwidth at 50%Φ REL MAX IF=350mA [Typ.]	Δλ	30	nm
Forward Voltage IF=350mA [Min.]	VF	2.0	V
Forward Voltage IF=350mA [Typ.]		2.5	
Forward Voltage IF=350mA [Max.]		3.0	
Temperature Coefficient Of Ipeak IF=350mA, -10°C ≤ T ≤ 100°C [Typ.]	TC λ peak	0.14	nm/°C
Temperature Coefficient Of Idom IF=350mA, -10°C ≤ T ≤ 100°C [Typ.]	TC λ dom	0.12	nm/°C
Temperature Coefficient Of VF IF=350mA, -10°C ≤ T ≤ 100°C [Typ.]	TCv	-3.0	mV/°C

ZMDH95W





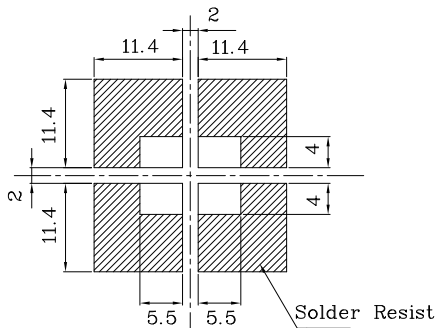
Reflow Soldering Profile For Lead-free SMT Process.



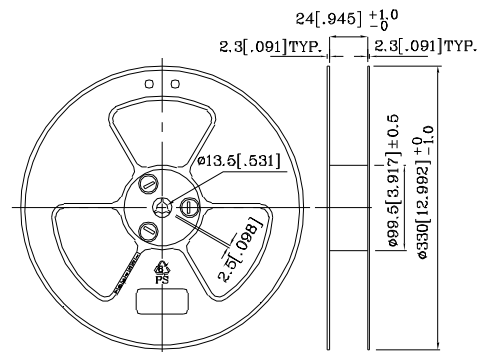
NOTES:

1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C-260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

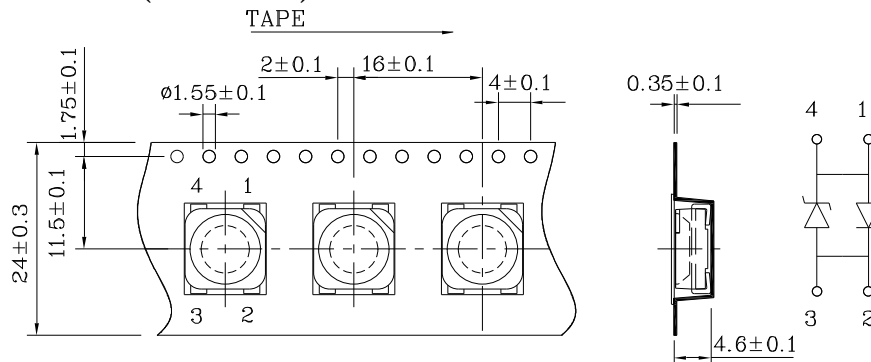
❖ Recommended Soldering Pattern
 (Units: mm ; Tolerance: ± 0.1)



Reel Dimension



❖ 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:

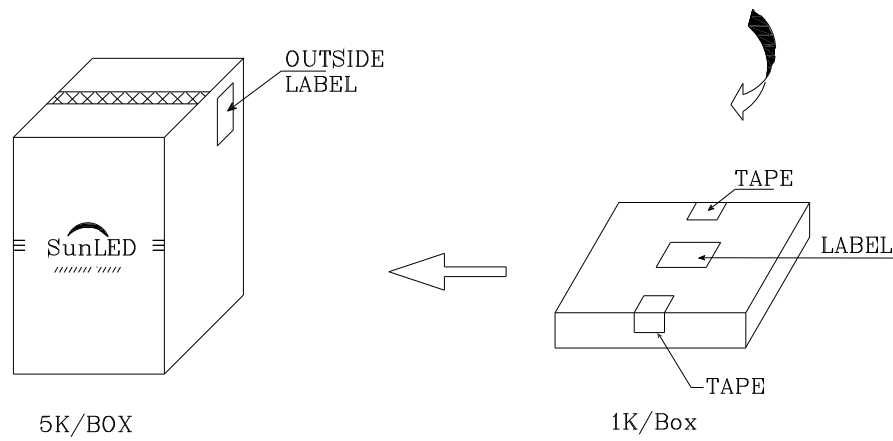
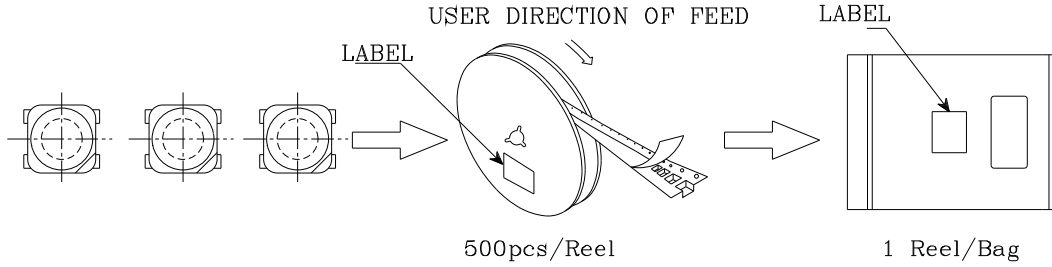
1. Wavelength: +/-1nm
2. Luminous Intensity/ Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V


Note: Accuracy may depend on the sorting parameters.



PACKING & LABEL SPECIFICATIONS

ZMDH95W



P/NO : Zxxx95x	
QTY : 500 pcs	CODE: XXX
S/N : XX	
LOT NO :	
 XXXXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	