

PRELIMINARY SPEC

PATENT PENDING

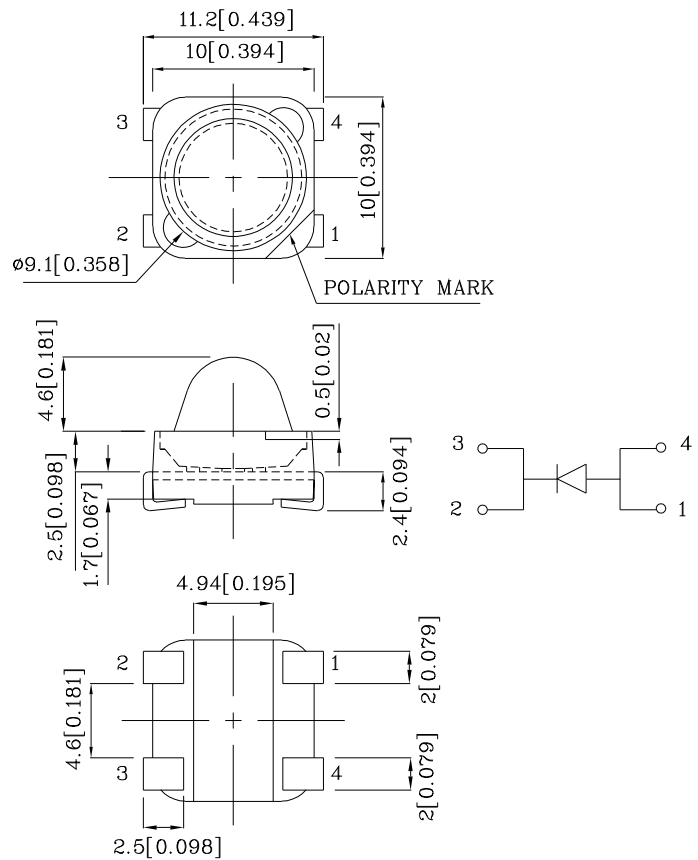
XZMYH95W-2

Features

- PLCC-4 PACKAGE.
- SINGLE COLOR.
- HIGH LUMINANCE.
- HIGH POWER, OPERATING CURRENT @ 350MA.
- SUITABLE FOR ALL SMT ASSEMBLY METHODS.
- PACKAGE : 300PCS / REEL.
- 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.

Part Number: **XZMYH95W-2**

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Flux (IF=350mA) lm		Wavelength nm λ P	Viewing Angle 2θ 1/2 [2]
				min.	typ.		
XZMYH95W-2	Yellow	InGaAlP	Water Clear	25	31.99	590	20°

Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Power Dissipation	P_t	1.2	W
Reverse Voltage	V_R	5	V
Junction temperature	T_j	110	$^\circ\text{C}$
Operating Temperature	T_{op}	-40 To +85	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 To +85	$^\circ\text{C}$
DC Forward Current[1]	I_F	350	mA
Peak Forward Current [3]	I_{FM}	500	mA
Thermal resistance [1]	R_{th}	80	$^\circ\text{C}/\text{W}$

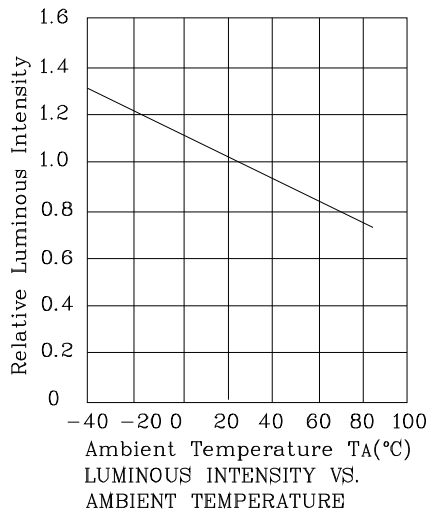
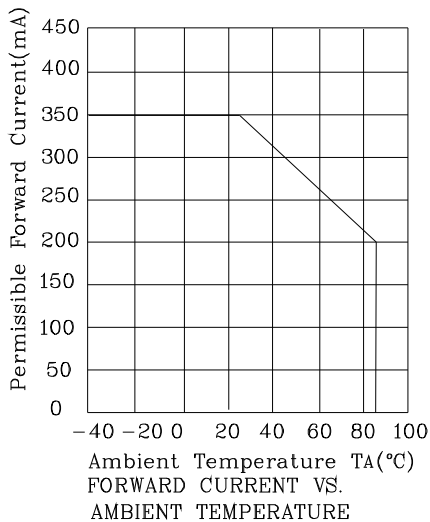
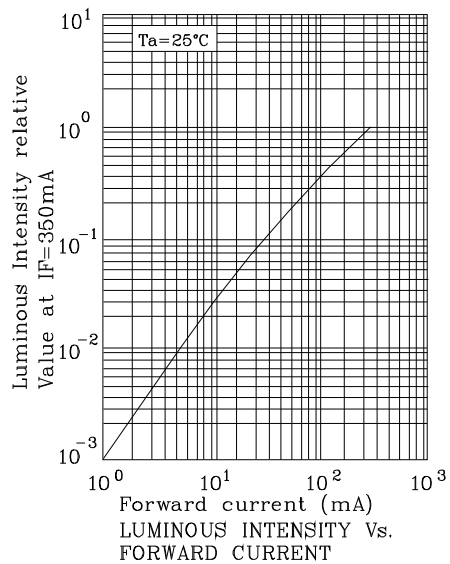
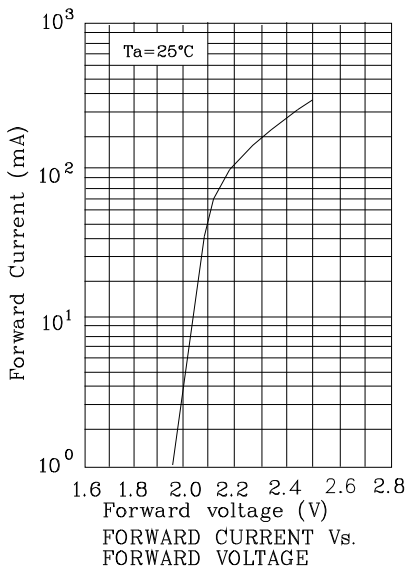
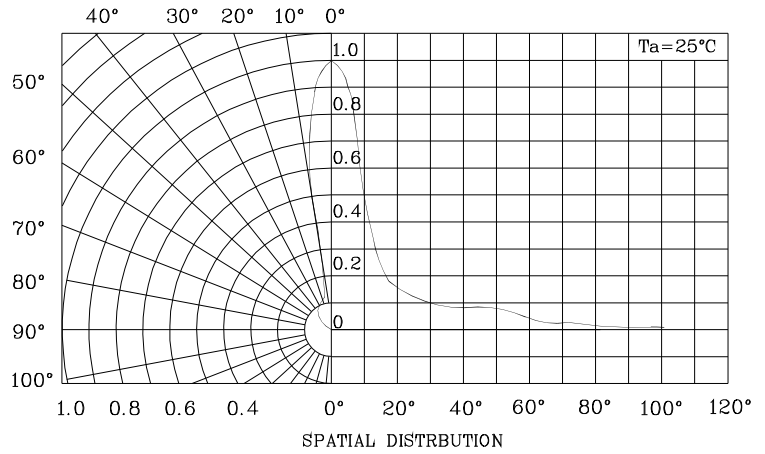
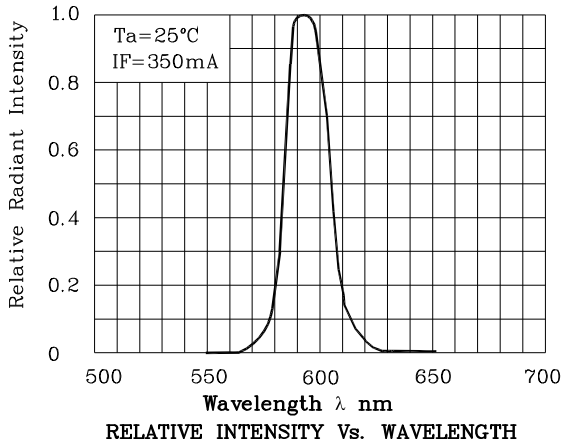
Notes:

- Results from mounting on PC board FR4(pad size $\geq 100\text{mm}^2$ per pad), mounted on pc board-metal core PCB is recommend for lowest thermal Resistance.
- 2θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
- 1/10 Duty Cycle, 0.1ms Pulse Width.

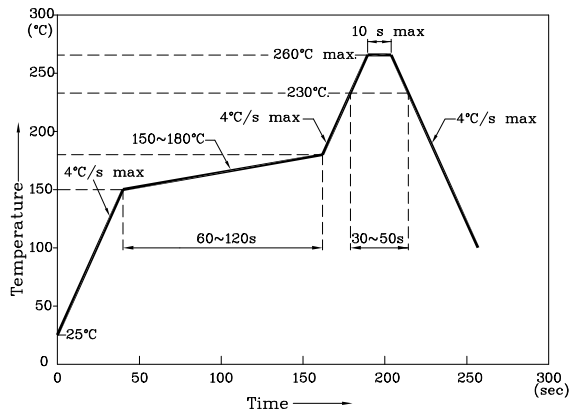
Electrical / Optical Characteristics at $T_A=25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Wavelength at peak emission $I_F=350\text{mA}$ [Typ.]	λ peak	590	nm
Dominate Wavelength $I_F=350\text{mA}$ [Typ.]	λ dom	588	nm
Spectral bandwidth at 50% Φ REL MAX $I_F=350\text{mA}$ [Typ.]	$\Delta\lambda$	20	nm
Viewing angle at 50% Φ_V [Typ.]	θ	20	$^\circ$
Forward Voltage $I_F=350\text{mA}$ [Min.]	V_F	2.0	V
Forward Voltage $I_F=350\text{mA}$ [Typ.]		2.5	
Forward Voltage $I_F=350\text{mA}$ [Max.]		3.0	
Reverse Current ($V_R=5\text{V}$) [Typ.]	I_R	10	μA
Temperature coefficient of I_{peak} $I_F=350\text{mA}$, $-10^\circ\text{C} \leq T \leq 100^\circ\text{C}$ [Typ.]	$TC_{\lambda peak}$	0.15	$\text{nm}/^\circ\text{C}$
Temperature coefficient of I_{dom} $I_F=350\text{mA}$, $-10^\circ\text{C} \leq T \leq 100^\circ\text{C}$ [Typ.]	$TC_{\lambda dom}$	0.13	$\text{nm}/^\circ\text{C}$
Temperature coefficient of V_F $I_F=350\text{mA}$, $-10^\circ\text{C} \leq T \leq 100^\circ\text{C}$ [Typ.]	TC_V	-2.0	$\text{mV}/^\circ\text{C}$

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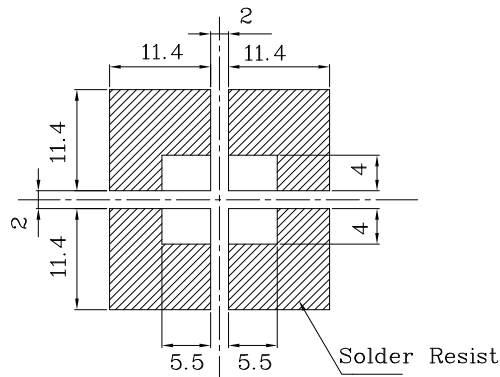
Reflow Soldering Profile For Lead-free SMT Process.



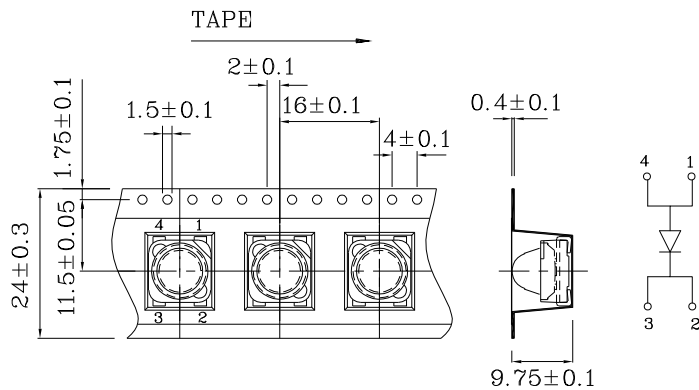
NOTES:

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)



❖ 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.