

Features

- High current operation for greater luminous output
- Rivet design allows for solderless mounting
- Low power consumption and thermal resistance
- Can be used with automatic insertion equipment
- RoHS compliant.



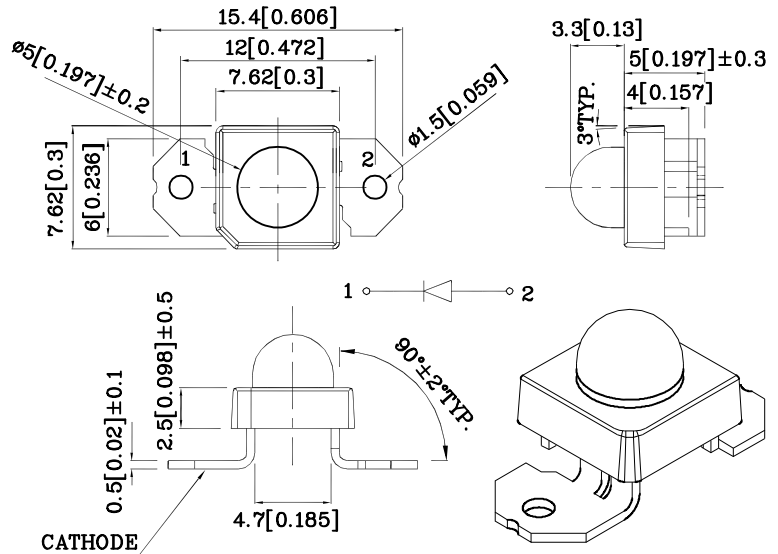
Benefits:

- Rugged design allows for easy maintenance
- Robust package for optimum reliability

Typical Applications:

- Automotive side markers
- Gaming and entertainment lighting
- Signs and road hazard indicators

Package Schematics



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.

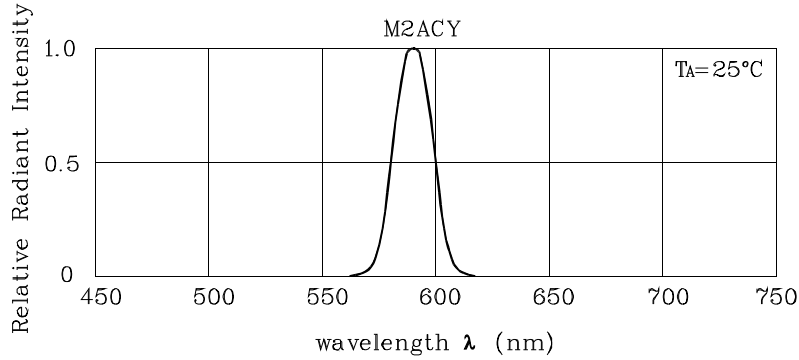
Absolute Maximum Ratings ($T_A=25^\circ\text{C}$)		M2ACY (AlGaInP)	Unit
Reverse Voltage	V_R	5	V
DC Forward Current	I_F	70	mA
Power Dissipation	P_D	210	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	T_{stg}	-55 ~ +85	
Lead Solder Temperature [1.5mm Below Seating Plane.][1]		260°C For 5 Seconds	

Operating Characteristics ($T_A=25^\circ\text{C}$)		M2ACY (AlGaInP)	Unit
Forward Voltage (Min.) ($I_F=70\text{mA}$)	V_F	2.2	V
Forward Voltage (Typ.) ($I_F=70\text{mA}$)	V_F	2.4	V
Forward Voltage (Max.) ($I_F=70\text{mA}$)	V_F	3	V
Reverse Current (Max.) ($V_R=5\text{V}$)	I_R	10	μA
Wavelength of Peak Emission (Typ.) ($I_F=70\text{mA}$)	λ_P	590	nm
Wavelength of Dominant Emission (Typ.) ($I_F=70\text{mA}$)	λ_D	589	nm
Spectral Line Full Width At Half Maximum (Typ.) ($I_F=70\text{mA}$)	$\Delta\lambda$	20	nm
Capacitance (Typ.) ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	45	pF
Thermal Resistance (Typ.)	$R_{\theta j-pin}$	125	°C/W

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ($I_F=70\text{mA}$) cd		Luminous Flux ($I_F=70\text{mA}$) lm	Viewing Angle 2 θ 1/2
				min.	typ.	typ.	
XSM2ACY93W	Yellow	AlGaInP	Water Clear	4.2	6.99	7.8	30°

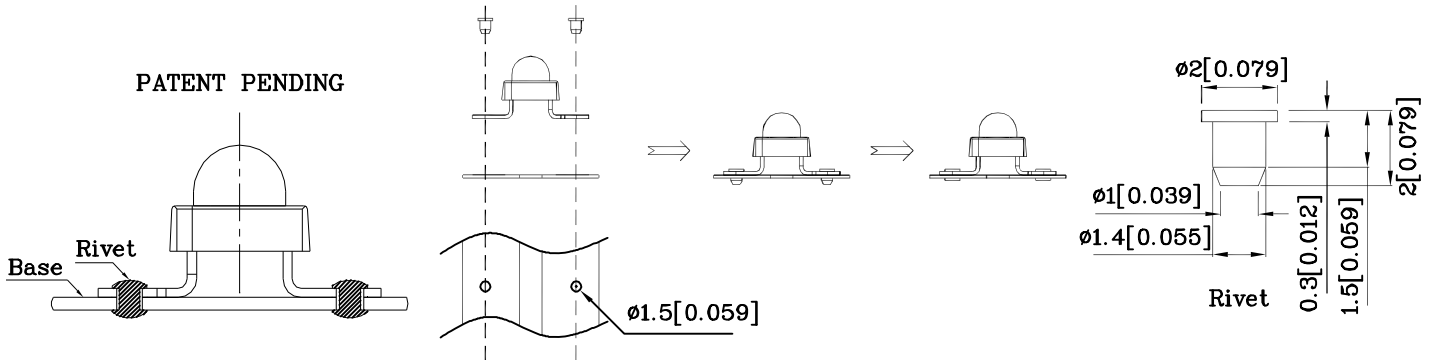
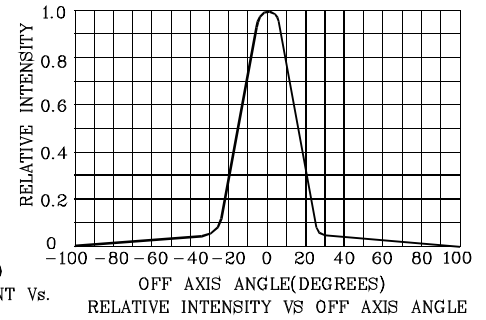
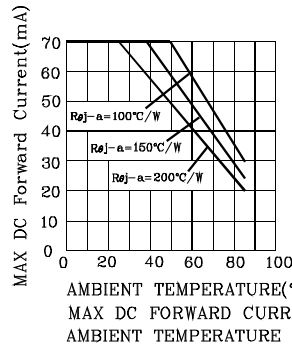
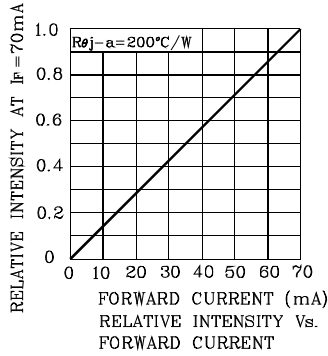
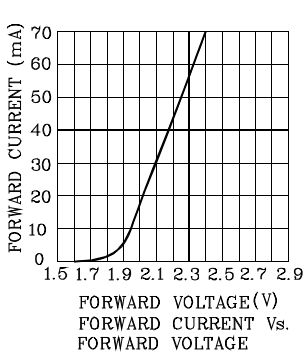
1. Luminous intensity is measured with an integrating sphere after the device has stabilized.

2. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.

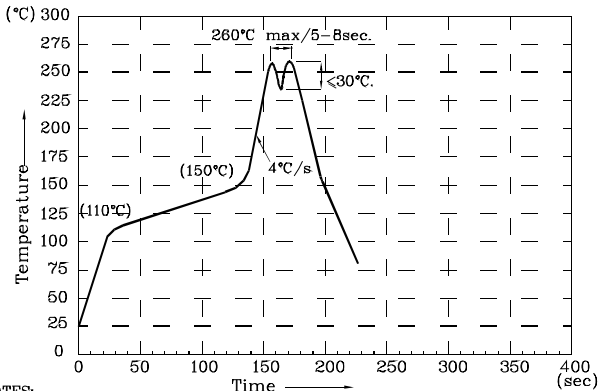


RELATIVE INTENSITY Vs. WAVELENGTH

❖ M2ACY



Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



NOTES:

1. Recommend the wave temperature 245°C~260°C. The maximum soldering temperature should be less than 260°C.
2. Do not apply stress on epoxy resins when temperature is over 85°C.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. During wave soldering, the PCB top-surface temperature should be kept below 105°C.
5. No more than once.

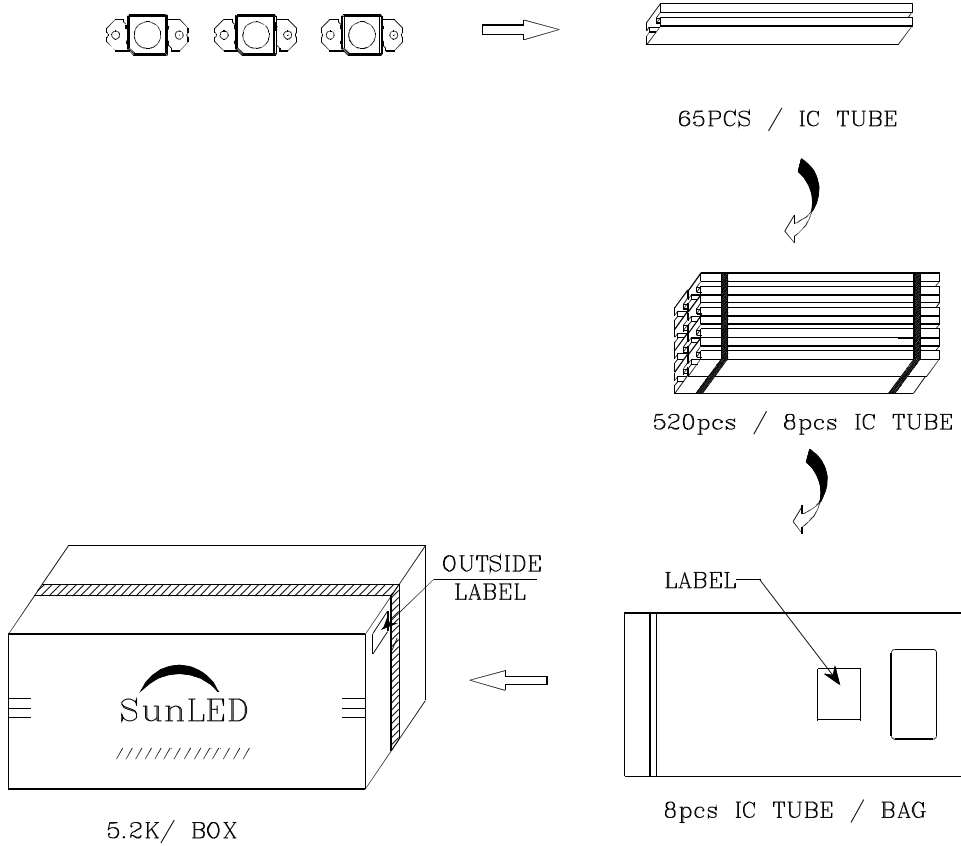

Remarks:

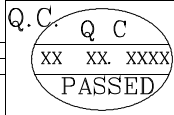

If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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

	
P/NO : XSxxx93x	
QTY : 520 pcs	CODE: XXX
S/N : XX	
LOT NO:	
	
RoHS Compliant	