



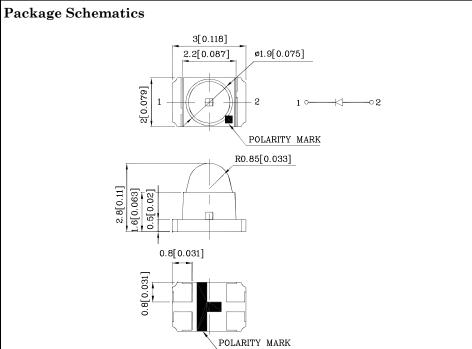


#### **Features**

- Ideal for indication light on hand held products
- Long life and robust package
- Variety of lens types and color choices available
- Tinned pads for improved solderability
- Package : 2000pcs / reel
- $\bullet$  Moisture sensitivity level : level 3
- RoHS compliant







#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.2(0.008")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		M2ACR (AlGaInP)	Unit	
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$I_{\mathrm{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	mA	
Power Dissipation	$P_{D}$	84	mW	
Operating Temperature	$T_{\mathrm{A}}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		

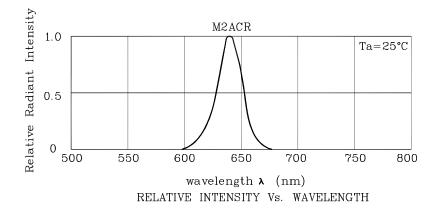
Operating Characteristics (T <sub>A</sub> =25°C)		M2ACR (AlGaInP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$ m V_F$	2.2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$ m V_F$	2.8	V
Reverse Current (Max.) $(V_R=5V)$	${ m I}_{ m R}$	10	uA
Wavelength of Peak Emission (Typ.) $(I_F=20 \text{mA})$	λΡ	640	nm
Wavelength of Dominant Emission (Typ.) $(I_F=20 \text{mA})$	$\lambda \mathrm{D}$	625	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$\triangle \lambda$	25	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	27	рF

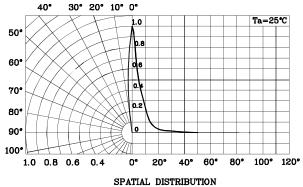
Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} \text{Luminous} \\ \text{Intensity} \\ \text{(I_F=20mA)} \\ \text{mcd} \end{array}$		Wavelength nm λΡ	Viewing Angle 20 1/2
				min.	typ.		
ZM2ACR50WT-2	Red	AlGaInP	Water Clear	8000	11990	640	10°

Apr 12,2011 SDSA8170 V1 Layout: Maggie L.

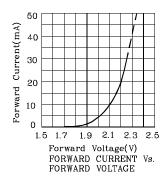


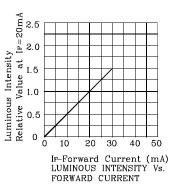


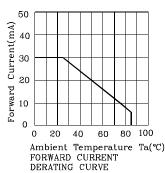


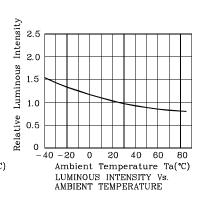


### **❖** M2ACR



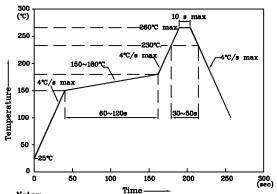






# LED is recommended for reflow soldering and soldering profile is shown below.

# Reflow Soldering Profile for SMD Products (Pb-Free Components)

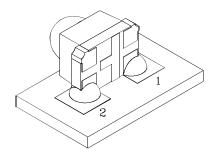


- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions

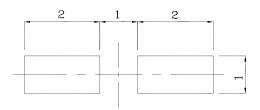




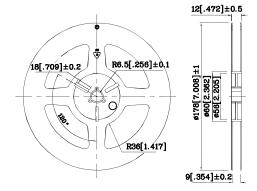
# ❖ The device has a single mounting surface. The device must be mounted according to the specifications.



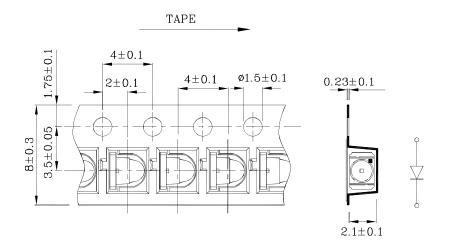
# ❖ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



### **❖** 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:

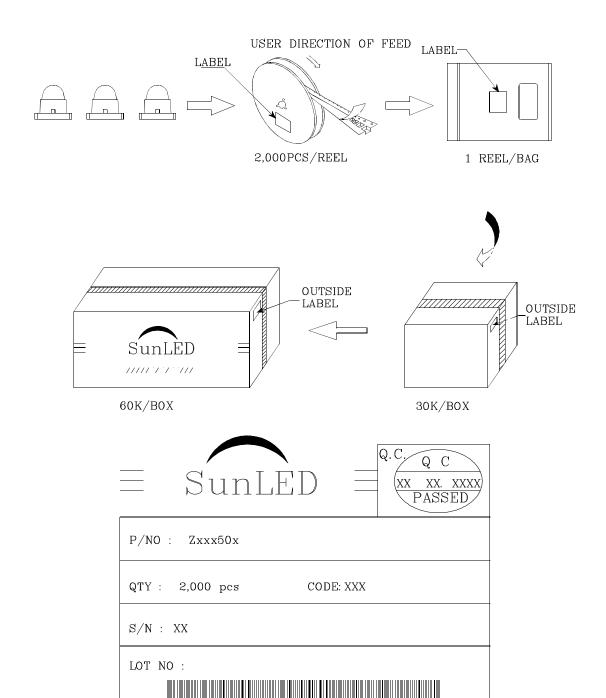
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.





### PACKING & LABEL SPECIFICATIONS



RoHS Compliant