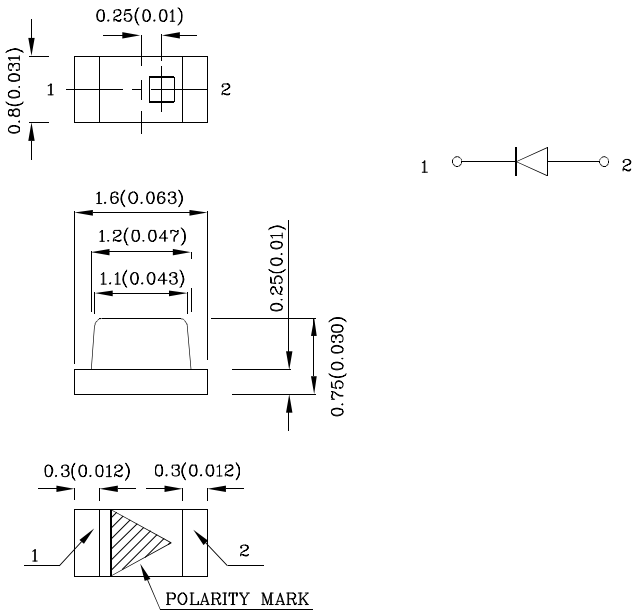
Part Number: XZM2CRK53W-1

1.6X0.8mm SMD CHIP LED LAMP

Features

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- RoHS compliant

Package Schematics



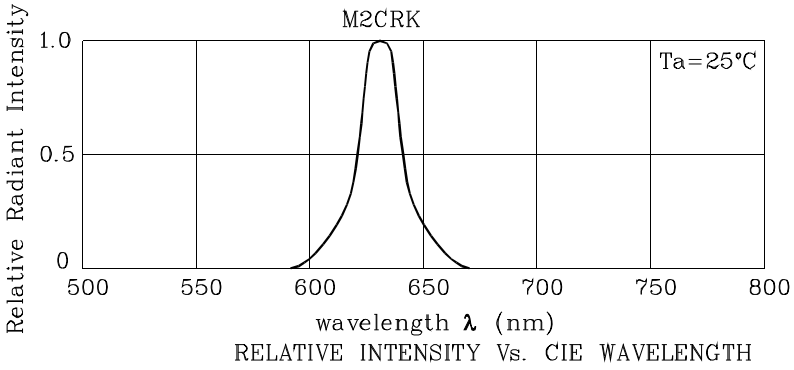
Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.1(0.004") unless otherwise noted.
3. Specifications are subject to change without notice.

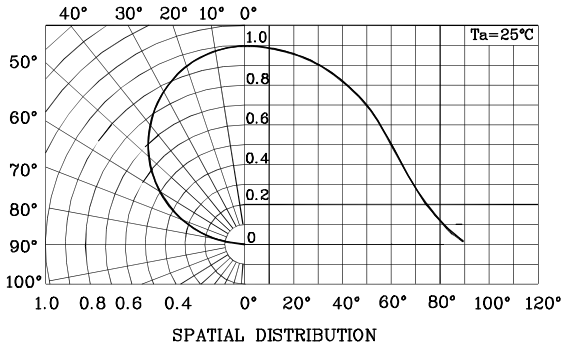
Absolute Maximum Ratings (T_A=25°C)		**M2CRK (AlGaInP)**	**Unit**
Reverse Voltage	V_R	5	V
Forward Current	I_F	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	150	mA
Power Dissipation	P_D	84	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	

Operating Characteristics (T_A=25°C)		**M2CRK (AlGaInP)**	**Unit**
Forward Voltage (Typ.) (I_F=20mA)	V_F	2.2	V
Forward Voltage (Max.) (I_F=20mA)	V_F	2.8	V
Reverse Current (Max.) (V_R=5V)	I_R	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I_F=20mA)	λP	640*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I_F=20mA)	λD	625*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I_F=20mA)	△λ	20	nm
Capacitance (Typ.) (V_F=0V, f=1MHz)	C	27	pF

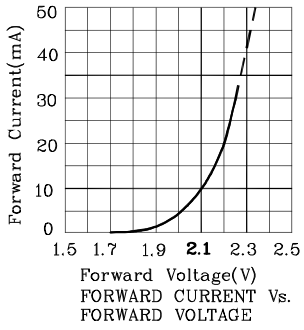
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I_F=20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 2θ 1/2
				min.	typ.		
XZM2CRK53W-1	Red	AlGaInP	Water Clear	700 200*	1095 347*	640*	120°

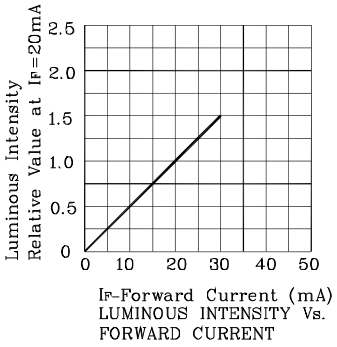
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

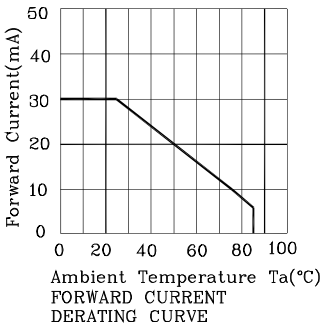


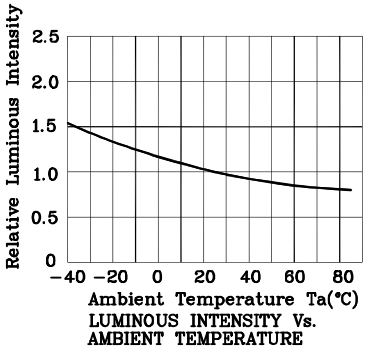


❖ M2CRK



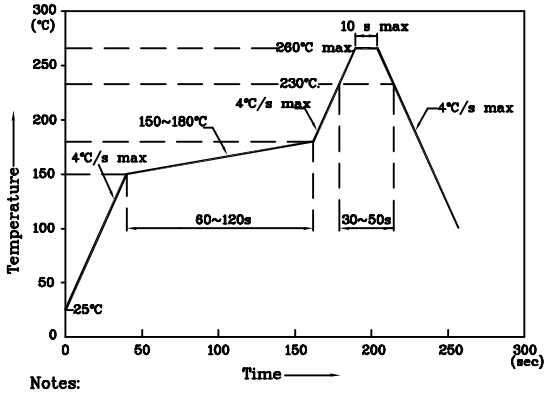






LED is recommended for reflow soldering and soldering profile is shown below.

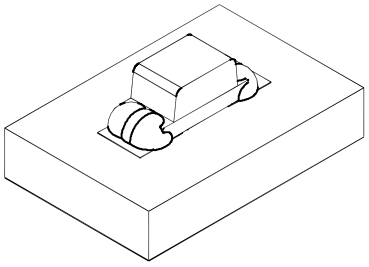
Reflow Soldering Profile for SMD Products (Pb−Free Components)



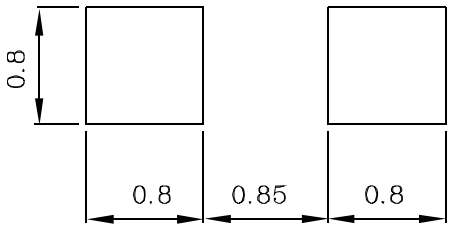
Notes:

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**

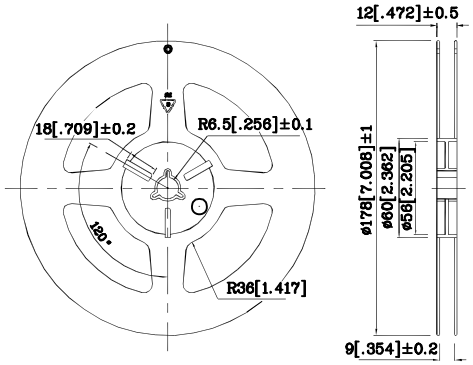
❖ **The device has a single mounting surface. The device must be mounted according to the specifications.**



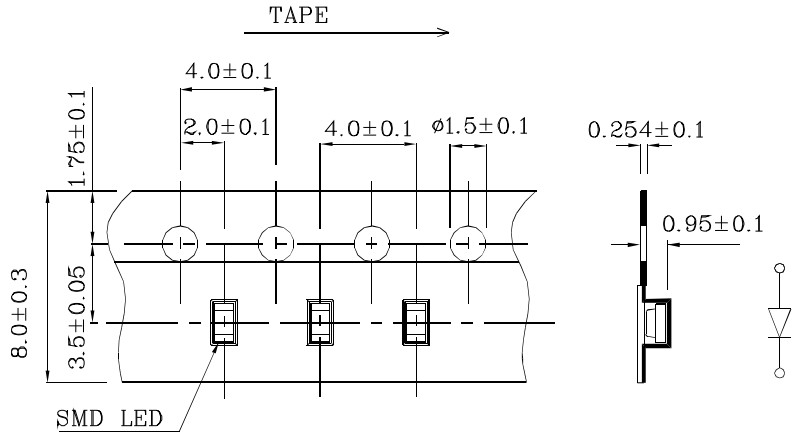
❖ **Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)**



❖ **Reel Dimension**



❖ **Tape Specification (Units : mm)**



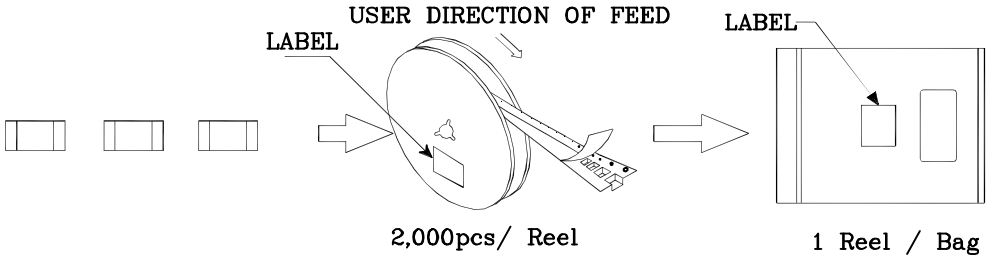
Remarks:

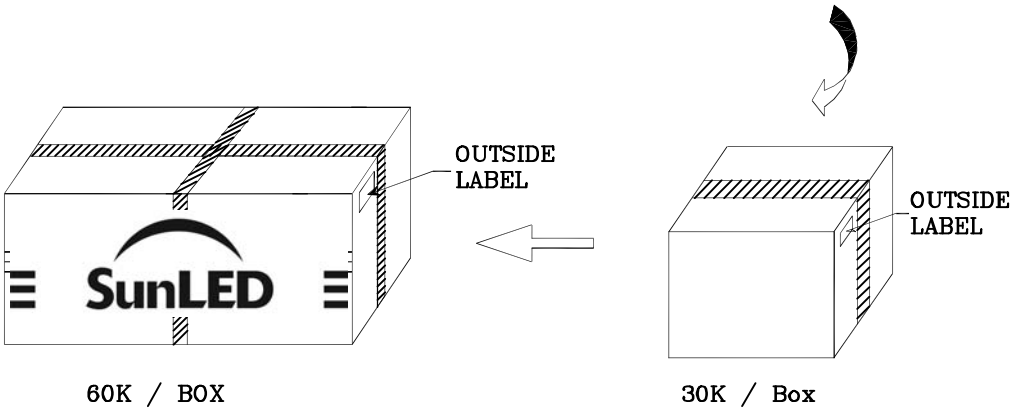
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

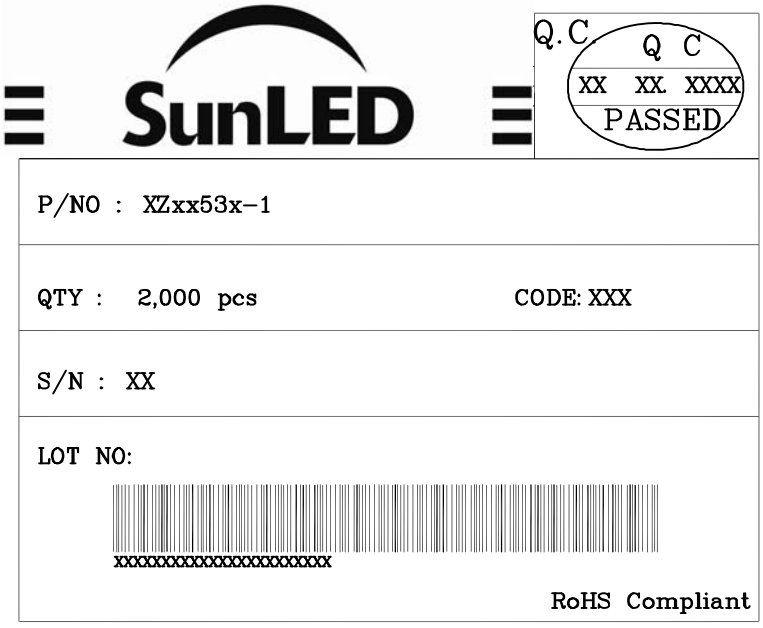
1. Wavelength: +/-1nm
2. Luminous intensity / luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS







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2. Contents within this document are subject to improvement and enhancement changes without notice.
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