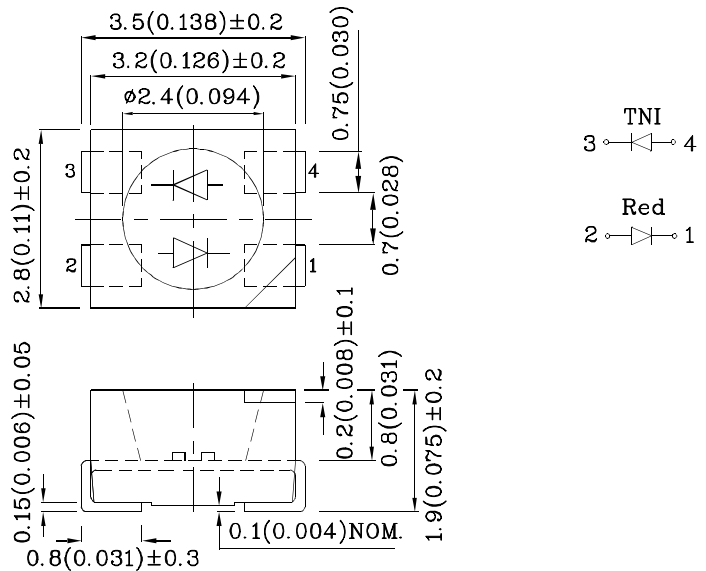


Features

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- RoHS compliant.



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 ($T_A=25^\circ\text{C}$)		Red (AlGaInP)	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	50	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	150	mA
Power Dissipation	P_D	125	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +85	

A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

Operating Characteristics ($T_A=25^\circ\text{C}$)		Red (AlGaInP)	Unit
Forward Voltage (Typ.) ($I_F=20\text{mA}$)	V_F	2.1	V
Forward Voltage (Max.) ($I_F=20\text{mA}$)	V_F	2.5	V
Reverse Current (Max.) ($V_R=5\text{V}$)	I_R	10	μA
Wavelength of Peak Emission CIE127-2007* (Typ.) ($I_F=20\text{mA}$)	λ_P	660*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) ($I_F=20\text{mA}$)	λ_D	640*	nm
Spectral Line Full Width At Half-Maximum (Typ.) ($I_F=20\text{mA}$)	$\Delta\lambda$	20	nm
Capacitance (Typ.) ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	45	pF

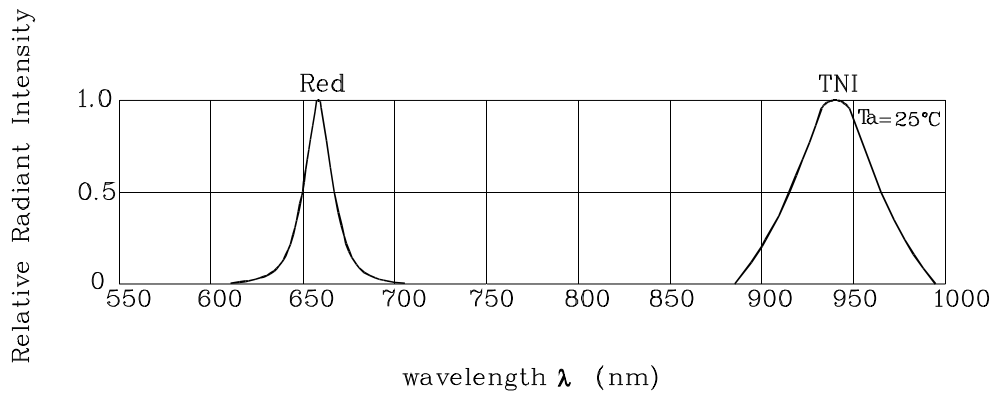
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* ($P_o = \text{mW/sr}$) @20mA		Wavelength CIE127-2007* nm λ_P	Viewing Angle 2 θ 1/2
				min.	typ.		
XZM2MRTNI45SC2C	Red	AlGaInP	Water Clear	-	-	400 120*	120°
	-	GaAs		2 1.2*	3.8 2.3*	597 228*	
						940*	

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

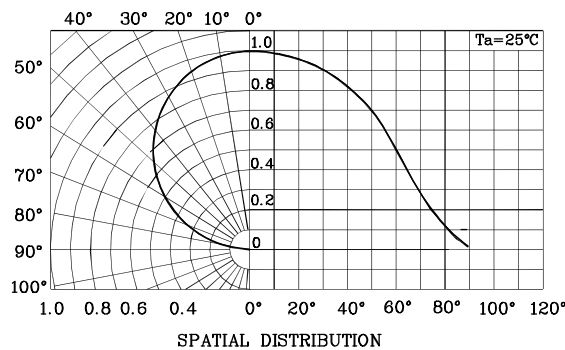
Absolute Maximum Ratings (T _A =25°C)		TNI (GaAs)	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	50	mA
Forward Current (Peak) 1/100 Duty Cycle 10us Pulse Width	i _{FS}	1200	mA
Power Dissipation	P _D	80	mW
Operating Temperature	T _A	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +85	

A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

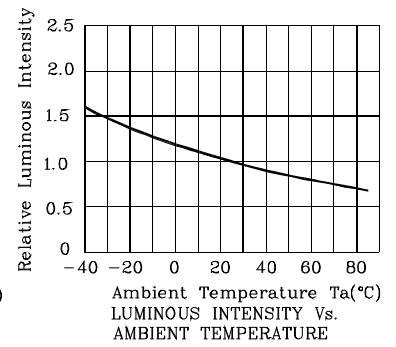
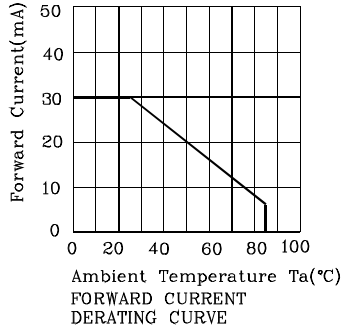
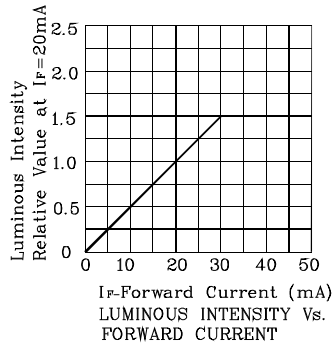
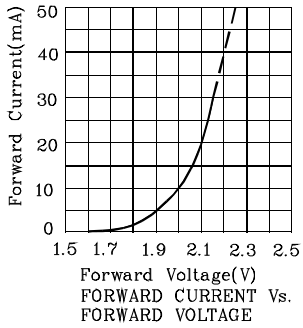
Operating Characteristics (T _A =25°C)		TNI (GaAs)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V _F	1.2	V
Forward Voltage (Max.) (I _F =20mA)	V _F	1.6	V
Reverse Current (Max.) (V _R =5V)	I _R	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA)	λ _P	940*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	50	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	C	90	pF



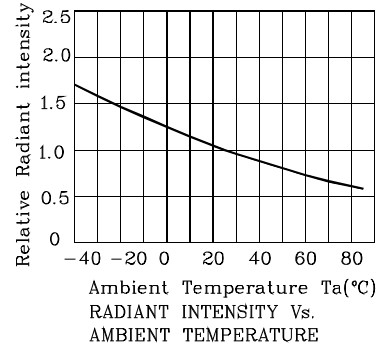
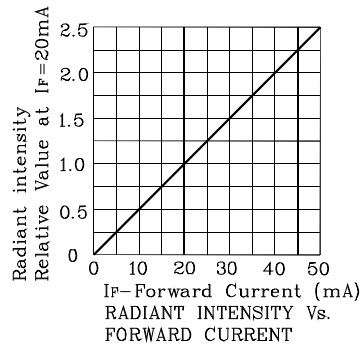
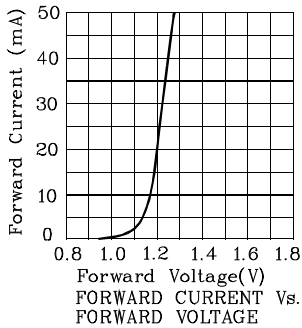
RELATIVE INTENSITY vs. CIE WAVELENGTH



❖ Red

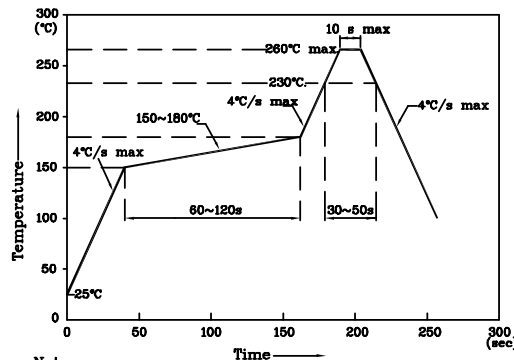


❖ TNI



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

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

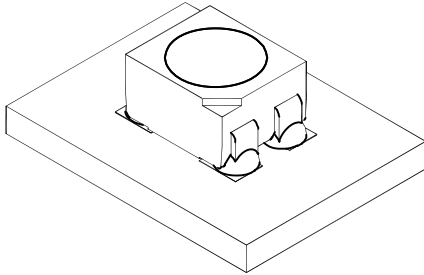


Notes:

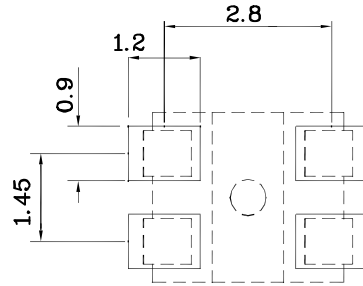
1. Maximum soldering temperature should not exceed 280°C
2. Recommended reflow temperature: 145°C-280°C
3. Do not put stress to the epoxy resin during high temperatures conditions



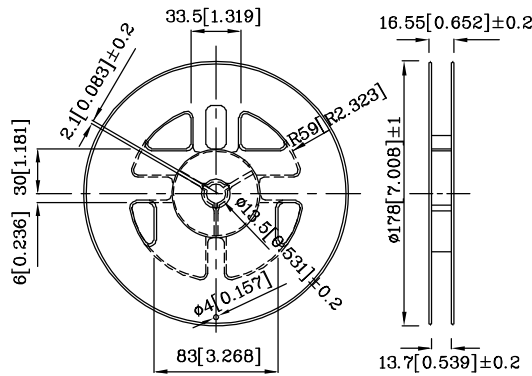
❖ The device has a single mounting surface.
The device must be mounted according to the specifications.



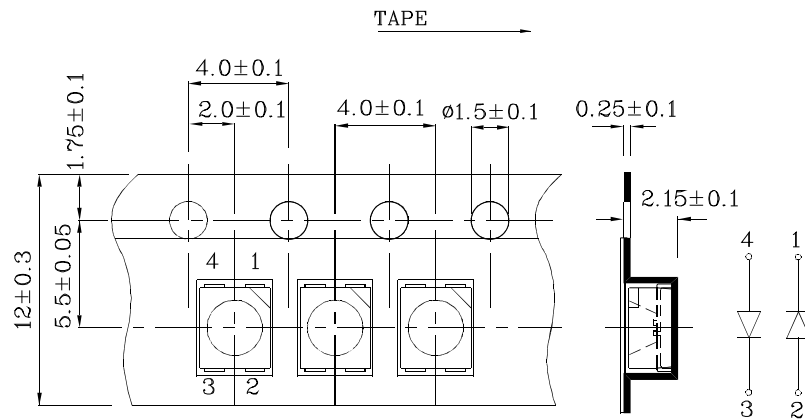
❖ Recommended Soldering Pattern
(Units : mm; Tolerance: ± 0.1)



❖ Reel Dimension



❖ Tape Specification (Units : mm)



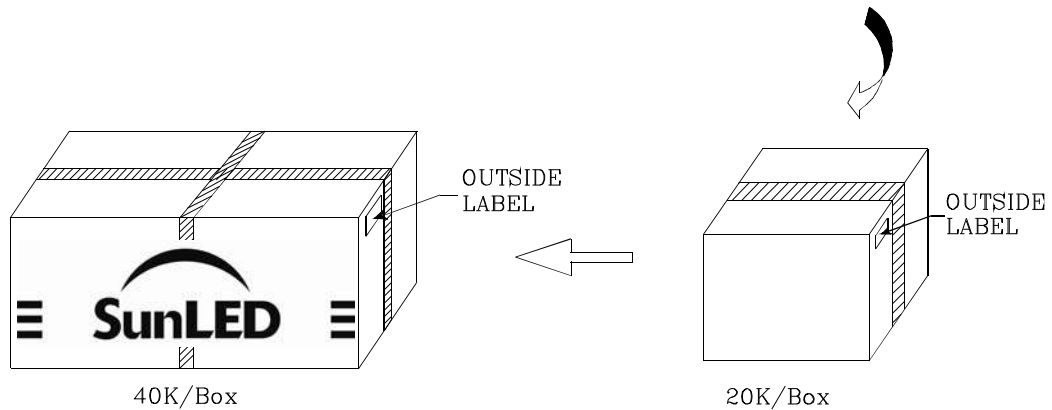
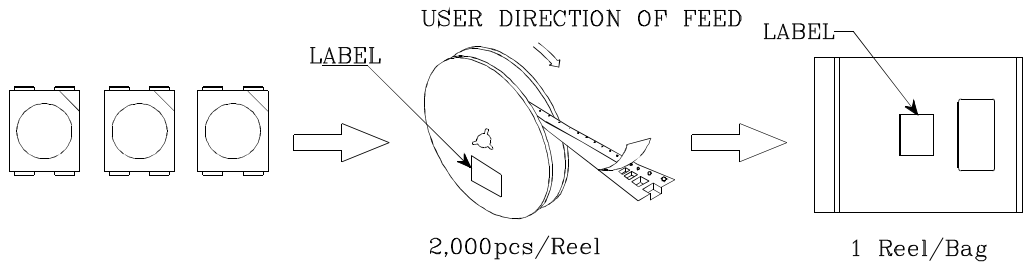
Remarks:


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






Q.C.

Q C

XX XX XXXX

PASSED

P/NO : XZxxx45x	
QTY : 2,000 pcs	CODE: XXX
S/N : XX	
LOT NO :	
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	

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