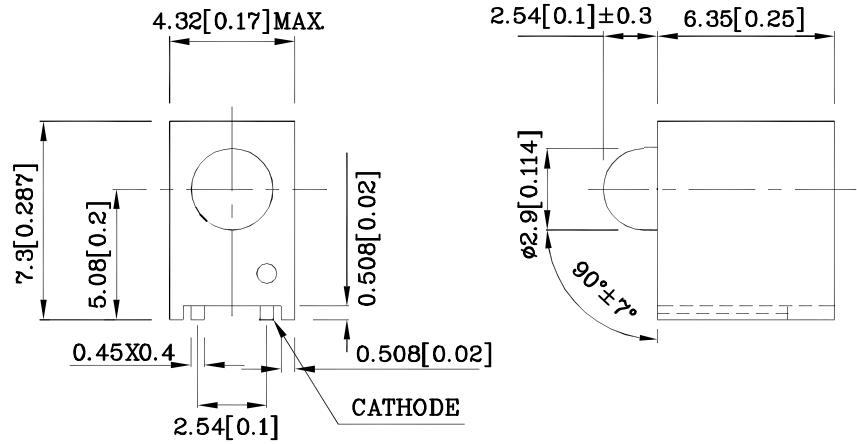


Features

- Black casing provides superior contrast
- Reliable & robust
- Package : 500pcs / reel
- Moisture sensitivity level : level 3
- Housing material: PPA
- High temperature resistant housing
- High glass transition temperature epoxy
- RoHS compliant



Package Schematics



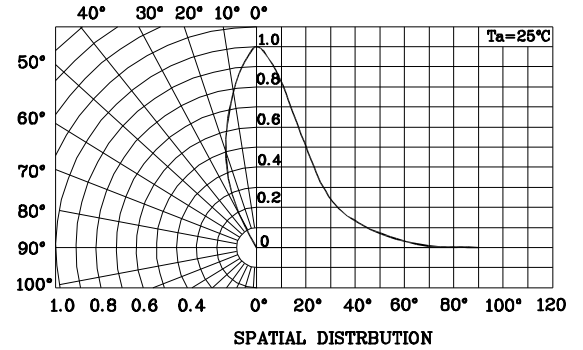
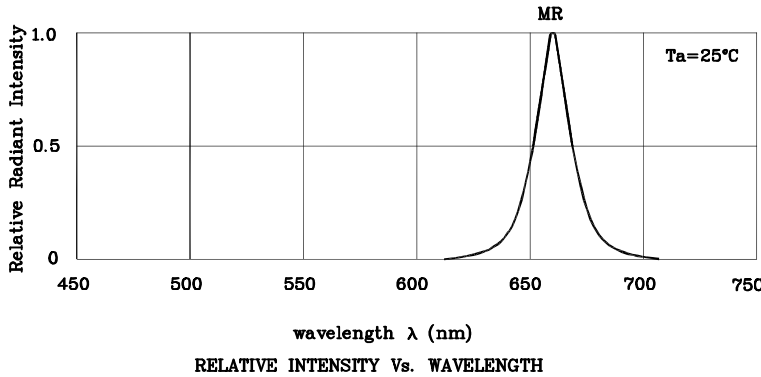
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25(0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

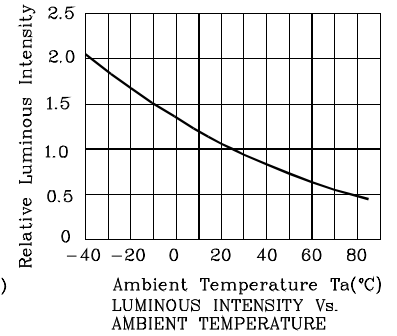
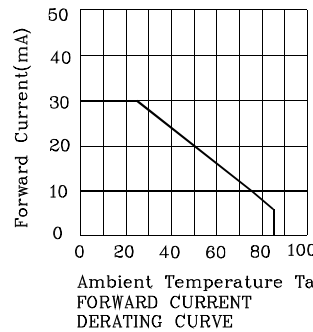
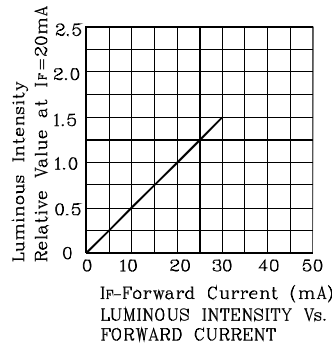
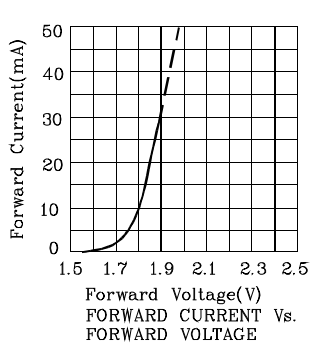
Absolute Maximum Ratings (TA=25°C)		MR (GaAlAs)	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	30	mA
Forward Current (peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	155	mA
Power Dissipation	PD	75	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	

Operating Characteristics (TA=25°C)		MR (GaAlAs)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	1.85	V
Forward Voltage (Max.) (IF=20mA)	VF	2.5	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	λ P	660	nm
Wavelength of Dominant Emission (Typ.) (IF=20mA)	λ D	640	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	20	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	45	pF

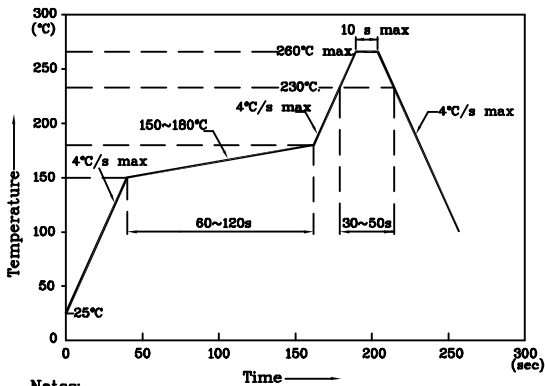
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XNK1LMR147DSMD	Red	GaAlAs	Red Diffused	180	347	660	40°



❖ MR

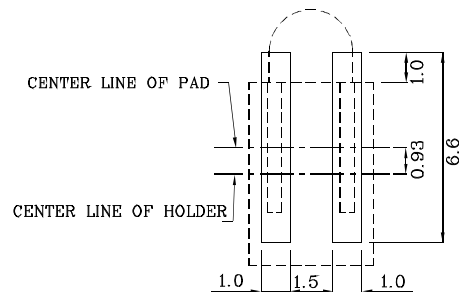


Reflow Soldering Profile for SMD Products (Pb-Free Components)



- 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

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



Remarks:

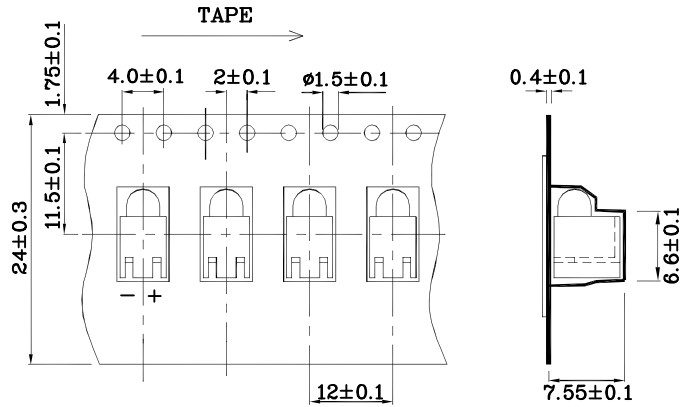
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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

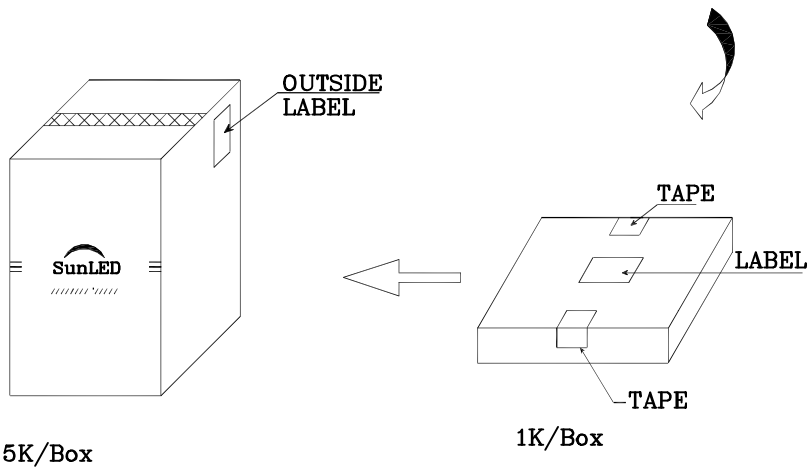
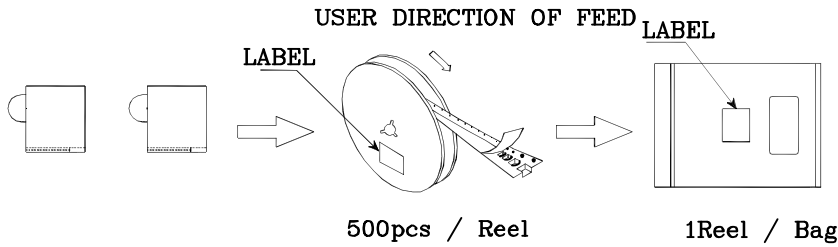
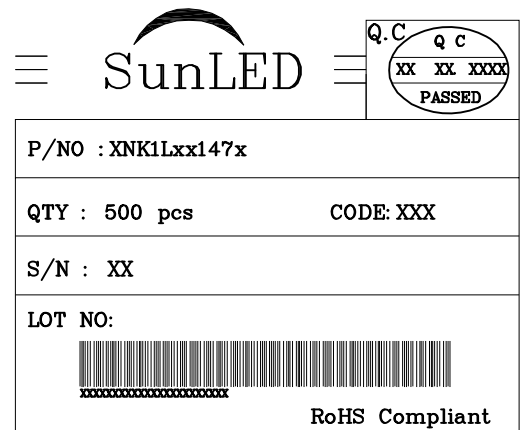
Note: Accuracy may depend on the sorting parameters.




❖ Tape Specification (Units : mm)



PACKING & LABEL SPECIFICATIONS

QC label: Q.C q.c XX XX XXXX PASSED

P/NO : XNK1Lxx147x	
QTY : 500 pcs	CODE: XXX
S/N : XX	
LOT NO:	
	
RoHS Compliant	