

### 3.0x1.0mm SMD CHIP LED LAMP

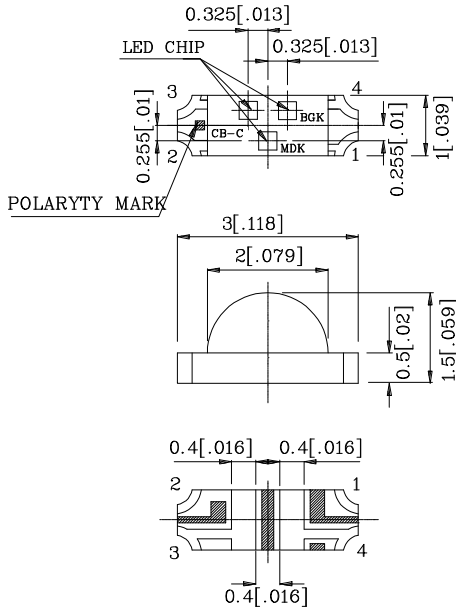


# SUN LED

XZMDKCBCBGK56W

Email : sales@us.sunled.com

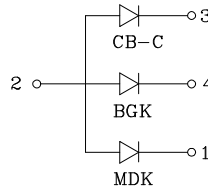
Web Site : www.sunled.com



### ATTENTION

OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

PRELIMINARY SPEC



Notes:

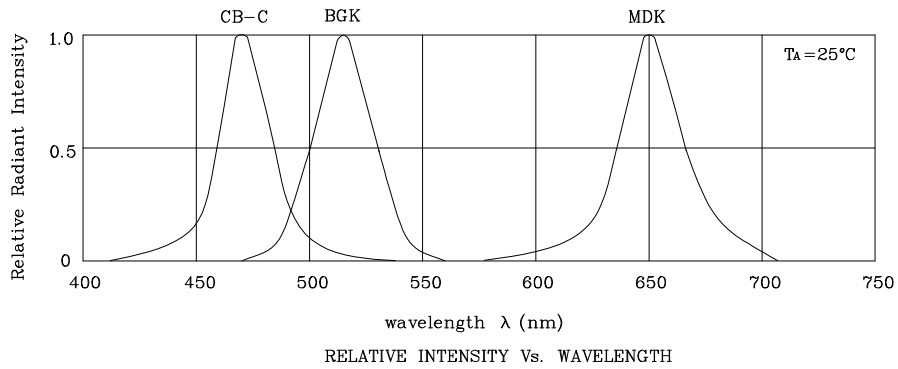
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.0079)$ " unless otherwise noted.

Absolute maximum ratings ( $T_A=25^\circ\text{C}$ )		MDK (InGaAlP)	CB-C (GaN)	BGK (InGaN)	Unit
Reverse voltage	$V_R$	5	5	5	V
Forward current	$I_F$	30	30	25	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	$i_{FS}$	185	150	130	mA
Power dissipation	$P_T$	170	105	105	mW
Operating temperature	$T_A$	-40 ~ +85	-40 ~ +85	-40 ~ +85	°C
Storage temperature	$T_{stg}$	-40 ~ +85	-40 ~ +85	-40 ~ +85	

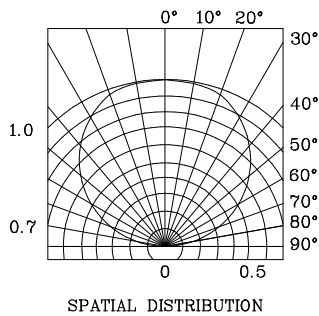
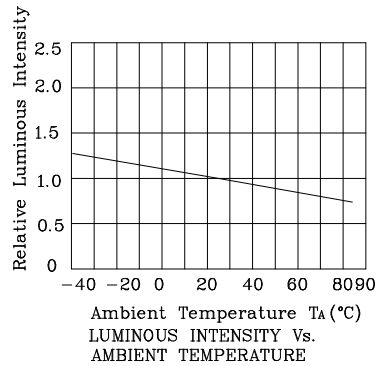
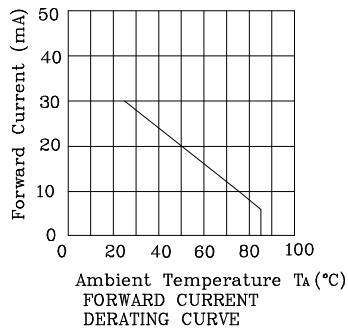
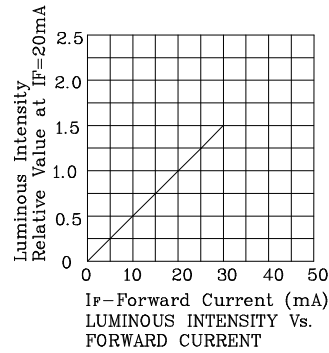
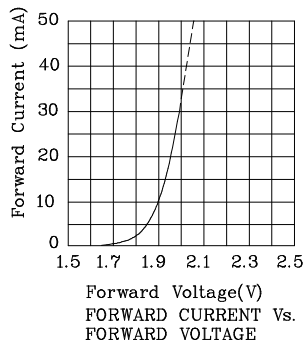
Operating Characteristics ( $T_A=25^\circ\text{C}$ )		MDK (InGaAlP)	CB-C (GaN)	BGK (InGaN)	Unit
Forward voltage (typ.) ( $I_F=20\text{mA}$ )	$V_F$	1.95	3.3	4.2	V
Forward voltage (max.) ( $I_F=20\text{mA}$ )	$V_F$	2.5	4.0	4.8	V
Reverse current ( $V_R=5\text{V}$ )	$I_R$	10	10	10	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	650	470	515	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	635	470	525	nm
Spectral Line half-width ( $I_F=20\text{mA}$ )	$\Delta\lambda$	28	25	30	nm
Capacitance ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	$C$	35	105	45	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XZMDKCBCBGK56W	Red	InGaAlP	Water Clear	70	198	650	120°
	Blue	GaN		36	98	470	
	Green	InGaN		50	118	515	

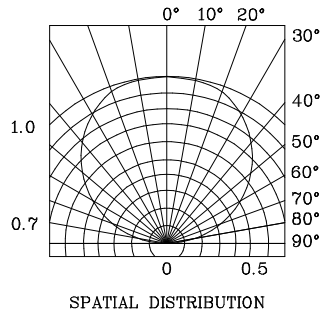
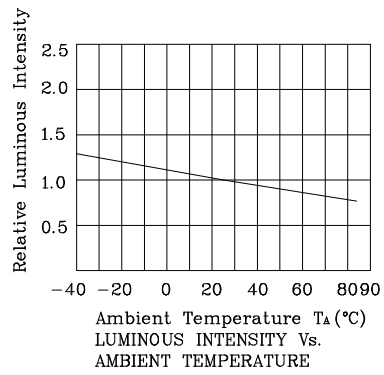
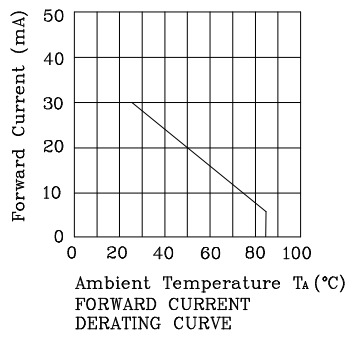
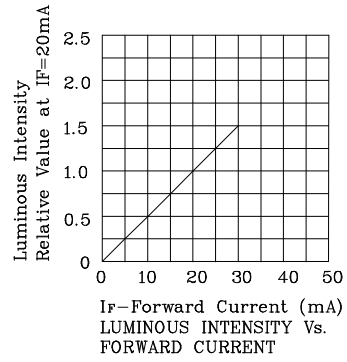
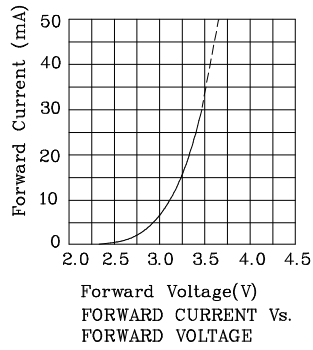
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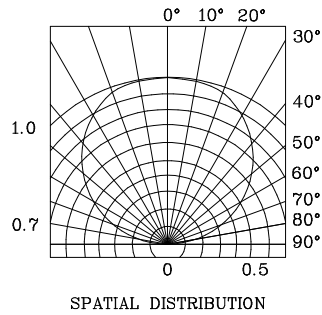
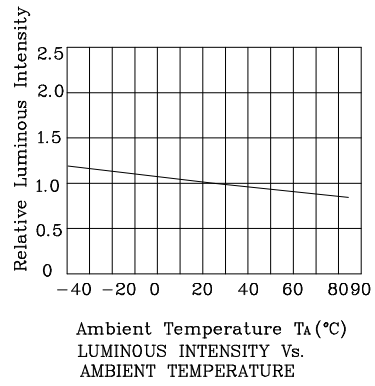
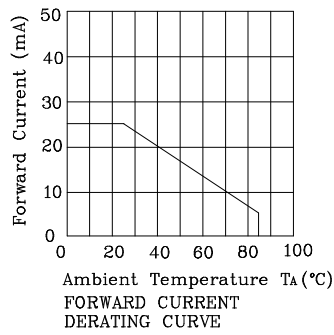
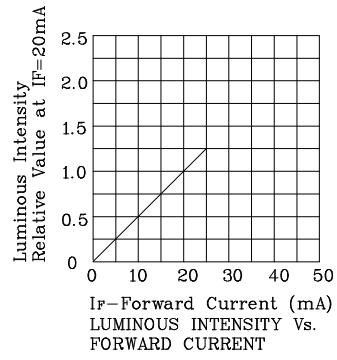
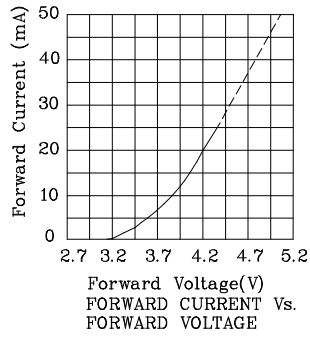


❖ MDK



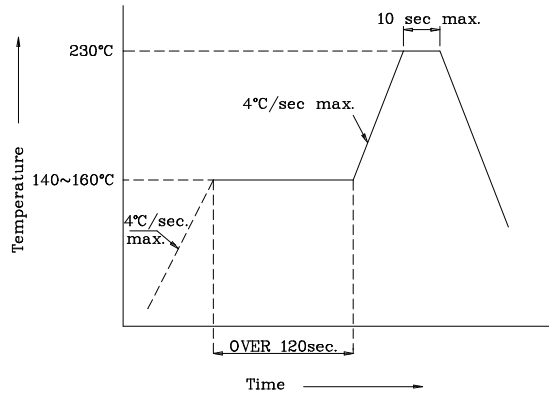
❖CB-C



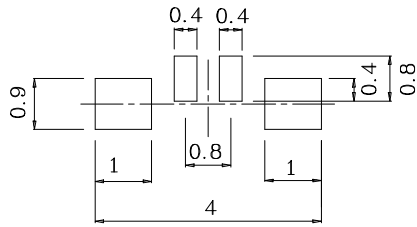


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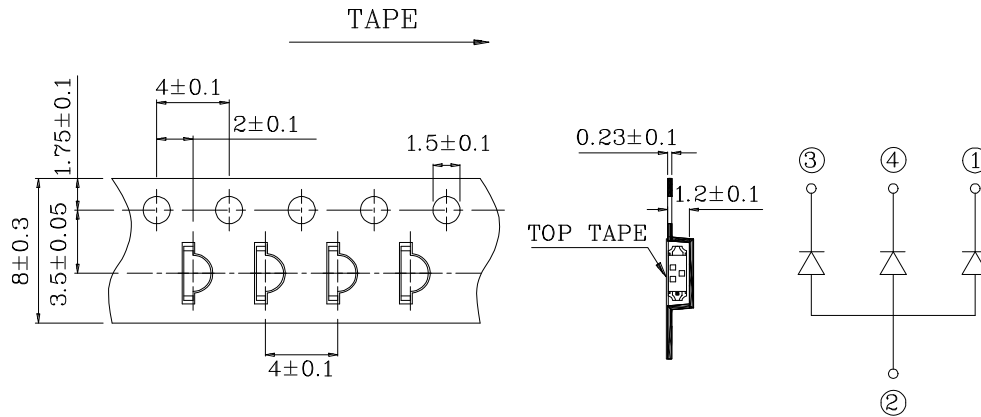
**❖ SMT Reflow Soldering Instructions**



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



**❖ Tape Specification (Units : mm)**



PACKAGE : 2000PCS / REEL.