SunLED
www.SunLEDusa.com

Part Number: XZDGKMDK116W10MA-1

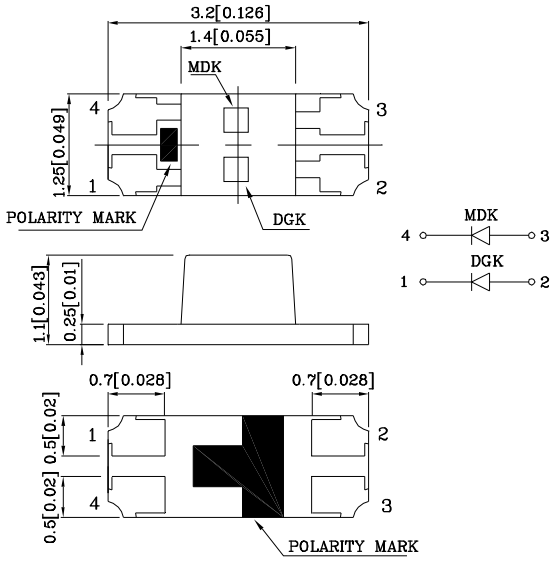
3.2X1.25mm BI-COLOR SMD CHIP LED LAMP

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

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Package Schematics



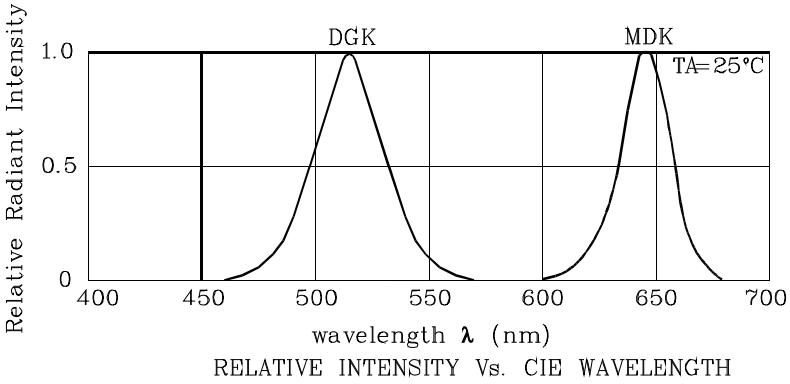
Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.2(0.008") unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T_A=25°C)		**DGK (InGaN)**	**MDK (AlGaInP)**	**Unit**
Reverse Voltage	V_R	5	5	V
Forward Current	I_F	25	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	150	185	mA
Power Dissipation	P_D	102.5	75	mW
Electrostatic Discharge Threshold (HBM)		450	-	V
Operating Temperature	T_A	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		

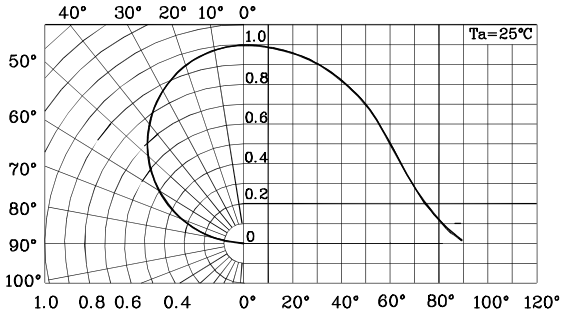
Operating Characteristics (T_A=25°C)		**DGK (InGaN)**	**MDK (AlGaInP)**	**Unit**
Forward Voltage (Typ.) (I_F=10mA)	V_F	3	1.85	V
Forward Voltage (Max.) (I_F=10mA)	V_F	4.1	2.5	V
Reverse Current (Max.) (V_R=5V)	I_R	50	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I_F=10mA)	λP	515*	645*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I_F=10mA)	λD	525*	630*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I_F=10mA)	△λ	35	28	nm
Capacitance (Typ.) (V_F=0V, f=1MHz)	C	45	35	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I_F=10mA) mcd min.	Luminous Intensity CIE127-2007* (I_F=10mA) mcd typ.	Wavelength CIE127-2007* nm λP	Viewing Angle 2θ 1/2
XZDGKMDK116W10MA-1	Green	InGaN	Water Clear	120 120*	248 248*	515*	120°
	Red	AlGaInP		50 15*	98 29*	645*	

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

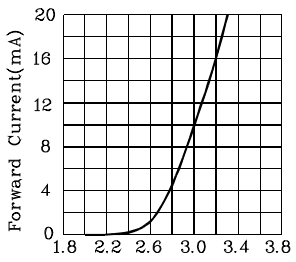


RELATIVE INTENSITY Vs. CIE WAVELENGTH

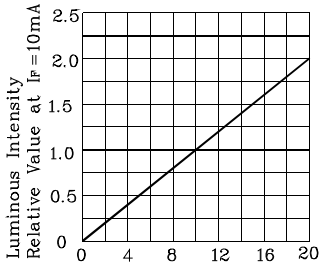


SPATIAL DISTRIBUTION

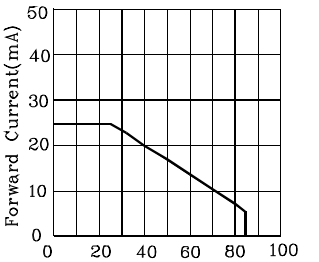
❖ DGK



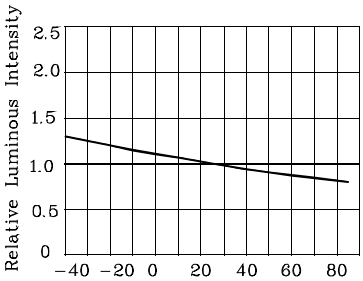
FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT

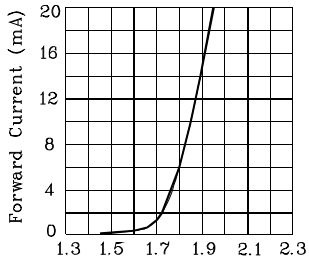


FORWARD CURRENT
DERATING CURVE

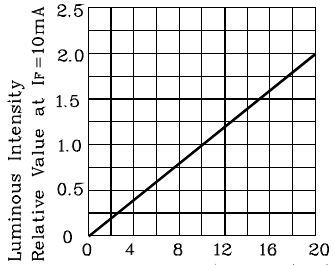


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

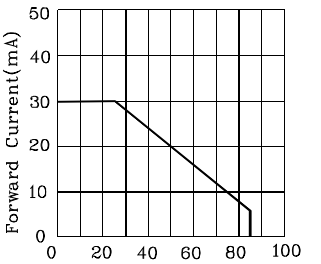
❖ MDK



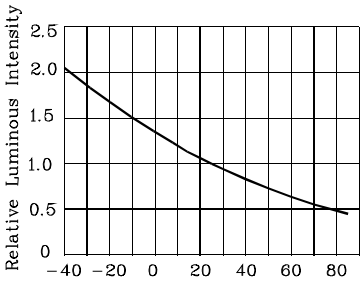
FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT



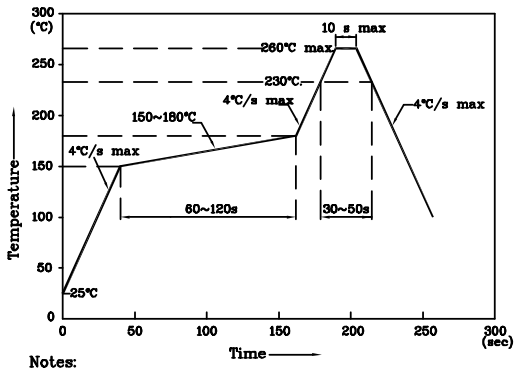
FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

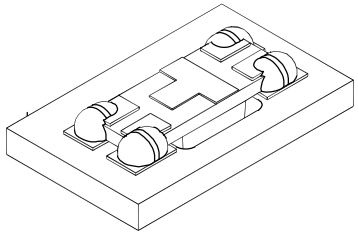
LED is recommended for reflow soldering and soldering profile is shown below.

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

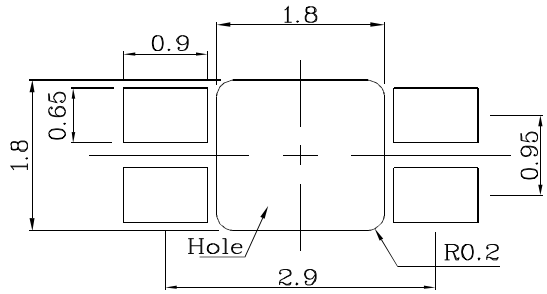


Notes:
1. Maximum soldering temperature should not exceed 260℃
2. Recommended reflow temperature: 145℃−260℃
3. Do not put stress to the epoxy resin during high temperatures conditions

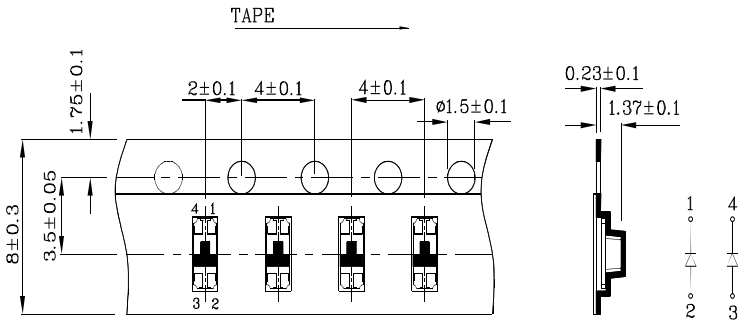
❖ **The device has a single mounting surface. The device must be mounted according to the specifications.**



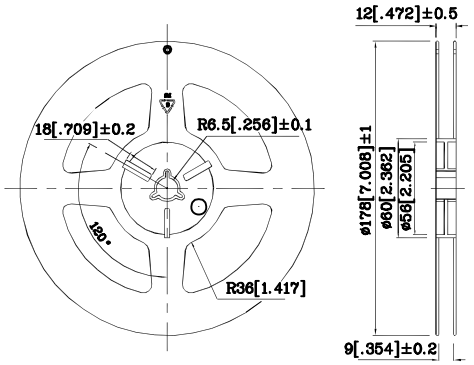
❖ **Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)**



❖ **Tape Specification (Units : mm)**



❖ **Reel Dimension**



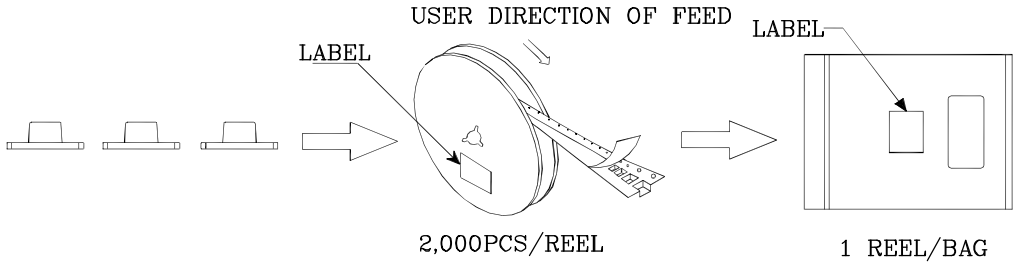
Remarks:

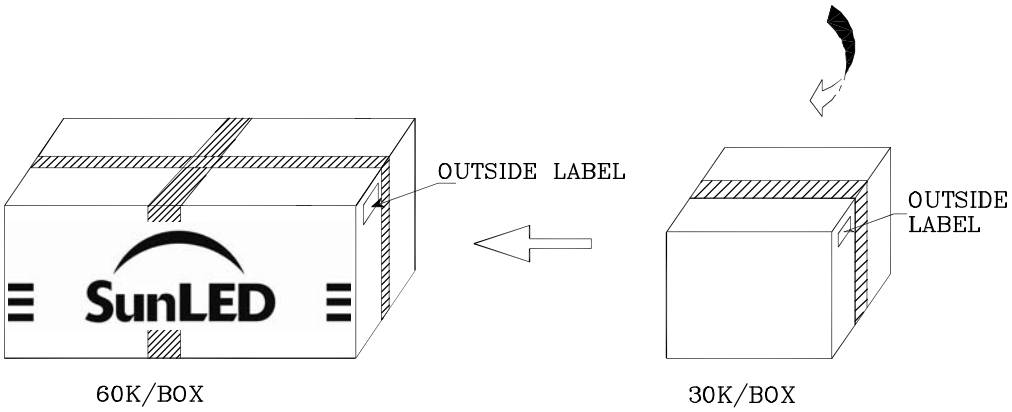
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

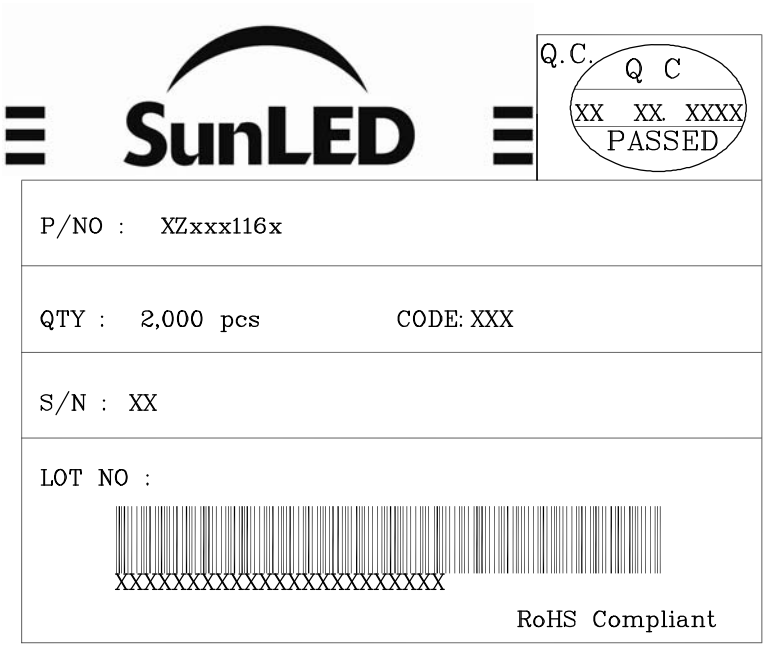
1. Wavelength: +/-1nm
2. Luminous intensity / luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS







TERMS OF USE

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2. Contents within this document are subject to improvement and enhancement changes without notice.
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XZMDK68W-2 XNK1LUG11DSMD XSMOK23MB XZM2CYK74W XZMDKDGK55W-8 XZTNI53W-8 DUR14C2 XVB1LUR147D XZFCBD14A XZM2ACY53W-8 XZVG53W-1 XDMDK57C XZCB25X109FS XZFBBM2CRKM2DGZ157W XZMDKT53W-6 XSMDK43MB XZFBA53S10MAV-4 XZFBB50W-2 XZFMDK14A2 XZM2CRK45WT XZM2CRK54W-1 XZVG105S XVM1LUGR59M XZMDK55W-A2RT XZMDKCBD62W-1 XLVGMYK59M XZMDKDGCBD110W XZMOK55W-1 XZTNI56W-1 XEUR2655M