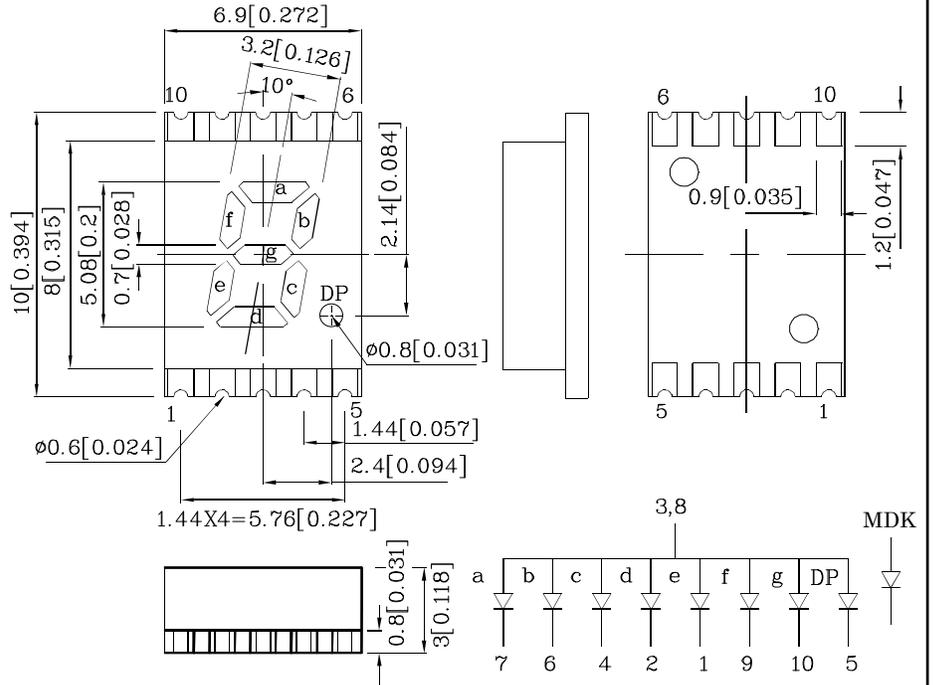


**Features**

- 0.2 inch digit height
- Robust package
- Low power consumption
- Standard configuration: Gray face w/ white segments
- Package : 650pcs / reel
- Moisture sensitivity level : level 2a
- RoHS compliant



**Package Schematics**



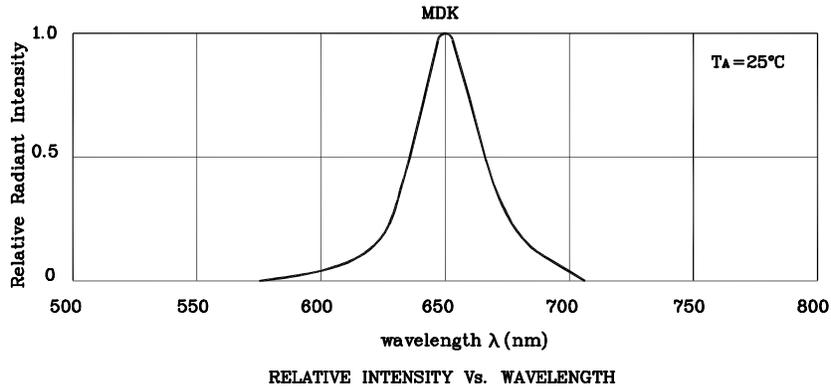
**Notes:**

1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25(0.01)$  unless otherwise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

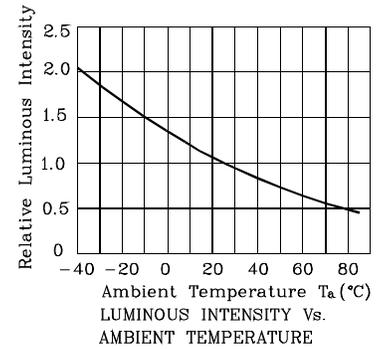
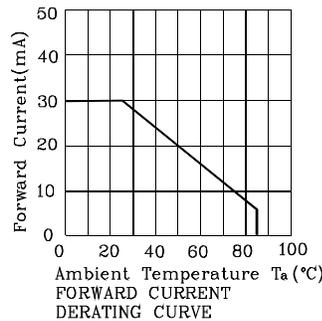
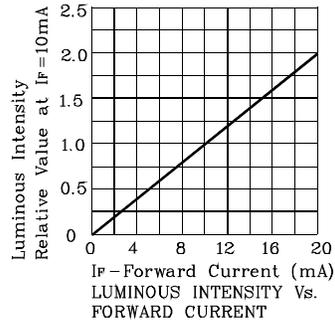
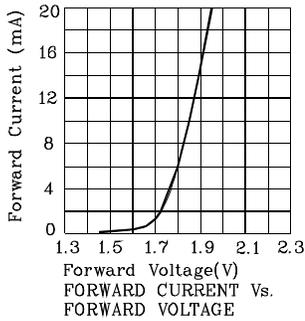
Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$ )		MDK (AlGaInP)	Unit
Reverse Voltage	$V_R$	5	V
Forward Current	$I_F$	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{FS}$	185	mA
Power Dissipation	$P_D$	75	mW
Operating Temperature	$T_A$	-40 ~ +85	°C
Storage Temperature	$T_{stg}$	-40 ~ +85	

Operating Characteristics ( $T_A=25^\circ\text{C}$ )		MDK (AlGaInP)	Unit
Forward Voltage (Typ.) ( $I_F=10\text{mA}$ )	$V_F$	1.85	V
Forward Voltage (Max.) ( $I_F=10\text{mA}$ )	$V_F$	2.5	V
Reverse Current (Max.) ( $V_R=5\text{V}$ )	$I_R$	10	$\mu\text{A}$
Wavelength of Peak Emission (Typ.) ( $I_F=10\text{mA}$ )	$\lambda_P$	650	nm
Wavelength of Dominant Emission (Typ.) ( $I_F=10\text{mA}$ )	$\lambda_D$	630	nm
Spectral Line Full Width At Half-Maximum (Typ.) ( $I_F=10\text{mA}$ )	$\Delta\lambda$	28	nm
Capacitance (Typ.) ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	C	35	pF

Part Number	Emitting Color	Emitting Material	Luminous Intensity ( $I_F=10\text{mA}$ ) ucd		Wavelength nm $\lambda_P$	Description
			min.	typ.		
XZFMDK05A	Red	AlGaInP	14000	29990	650	Common Anode, Rt.Hand Decimal.

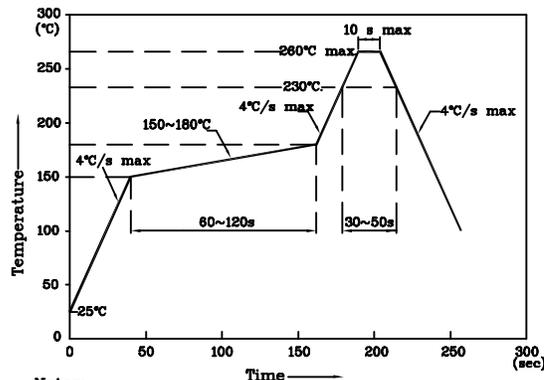


❖ MDK



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

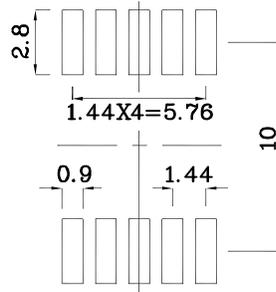
**Reflow Soldering Profile for SMD Products (Pb-Free Components)**



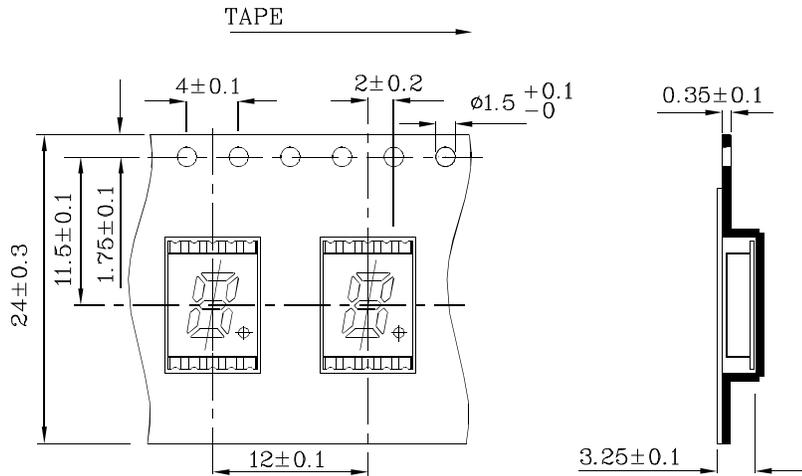
- Notes:
1. Maximum soldering temperature should not exceed 280°C
  2. Recommended reflow temperature: 145°C~260°C
  3. Do not put stress to the epoxy resin during high temperatures conditions



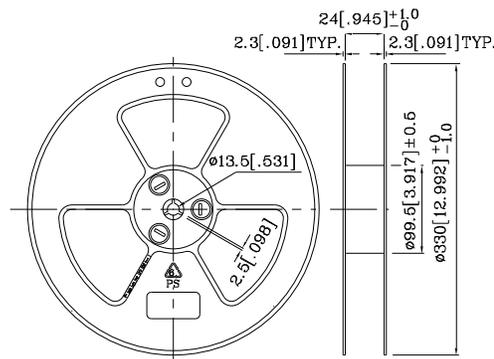
❖ Recommended Soldering Pattern (Units : mm; Tolerance:  $\pm 0.15$ )



❖ Tape Specification (Units : mm)



❖ Reel Dimension



Remarks:

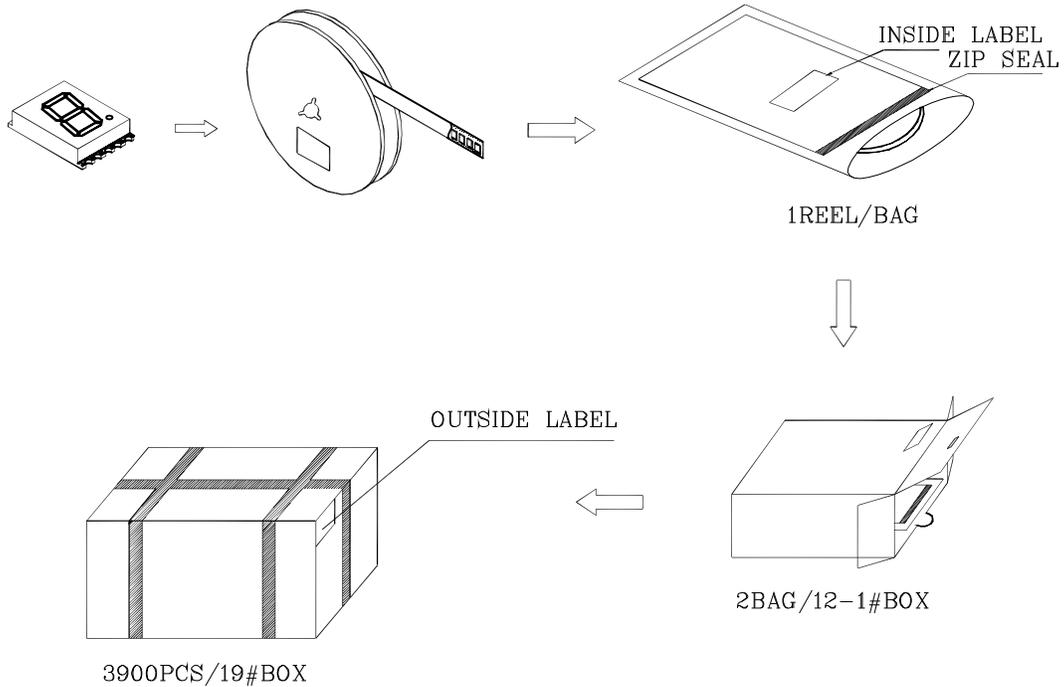
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength:  $\pm 1$ nm
2. Luminous intensity / luminous flux:  $\pm 15\%$
3. Forward Voltage:  $\pm 0.1$ V

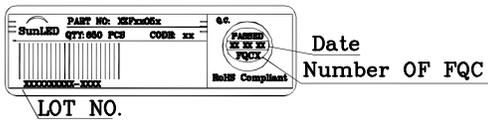
Note: Accuracy may depend on the sorting parameters.



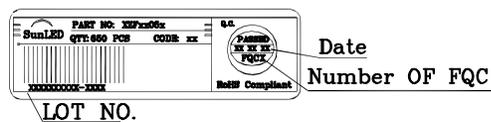
PACKING & LABEL SPECIFICATIONS



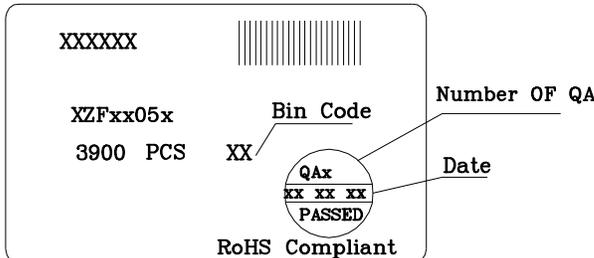
Inside Label On tape



Outside Label On Bag



Outside Label On 19#Box



Outside Label On 12-1#Box

