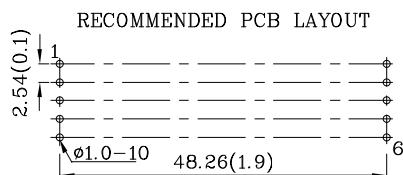
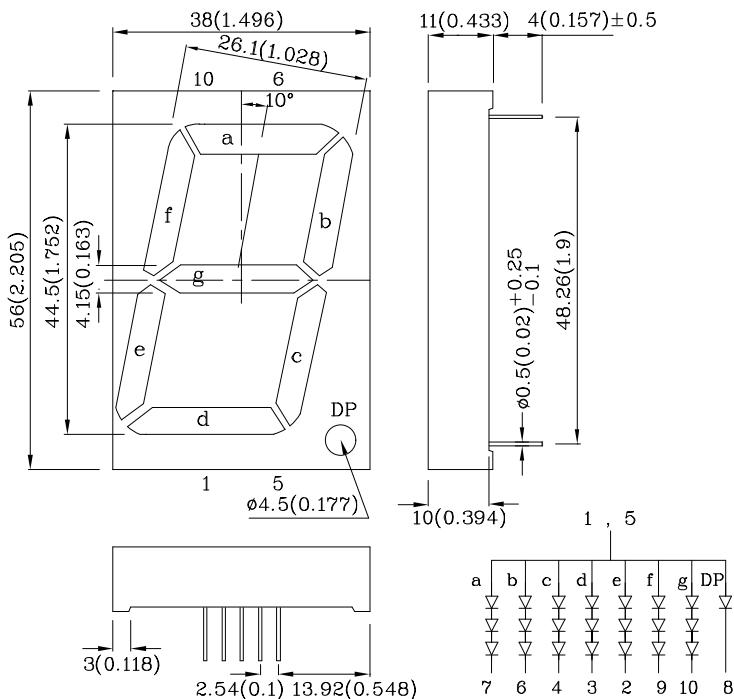


**Features**

- Low power consumption
- Robust package
- I.C. Compatible
- Standard configuration: Gray face w/ white segments
- Optional black face provides superior color contrast
- RoHS Compliant


**Package Schematics**


## Notes:

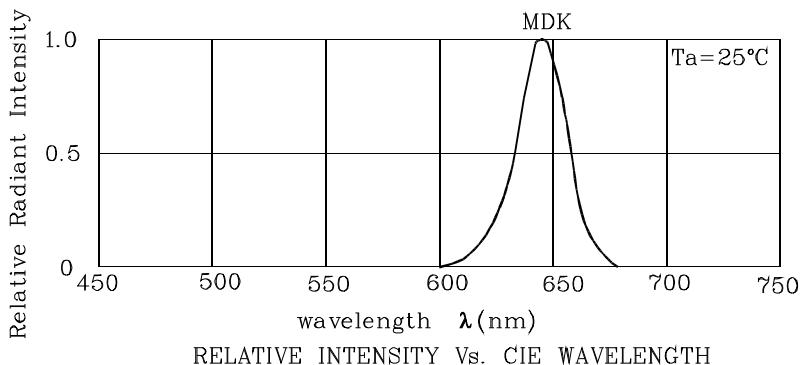
1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
2. Specifications are subject to change without notice.

Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$ )		MDK (AlGaInP)	Unit
Reverse Voltage ( Per Chip)	$V_R$	5	V
Forward Current (D <sub>p</sub> )	$I_F$	30 (30)	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width ( D <sub>p</sub> )	$I_{F\text{S}}$	185 (185)	mA
Power Dissipation (Per Chip)	$P_D$	75	mW
Operating Temperature	$T_A$	-40 ~ +85	$^\circ\text{C}$
Storage Temperature	$T_{\text{Stg}}$	-40 ~ +85	
Lead Solder Temperature [2mm Below Package Base]	260°C For 3-5 Seconds		

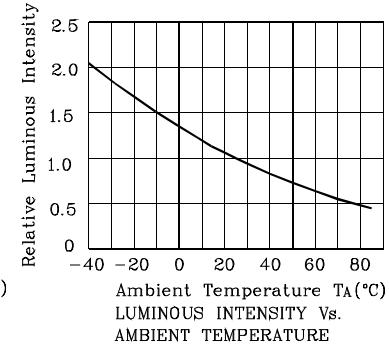
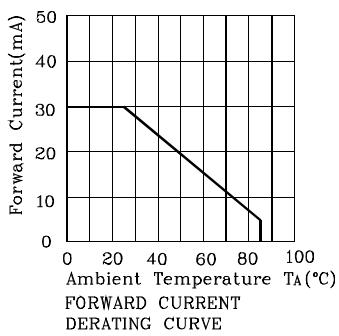
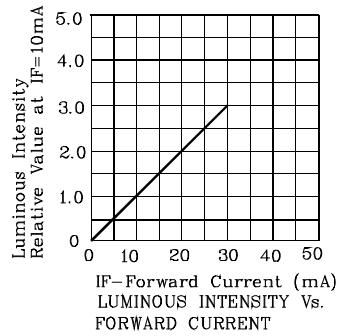
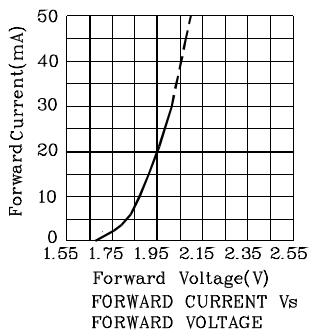
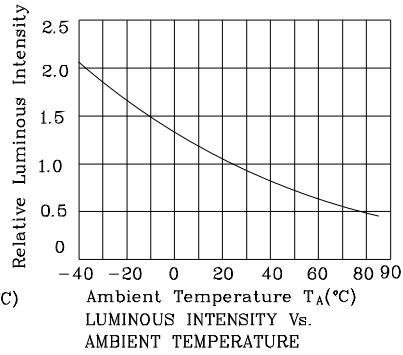
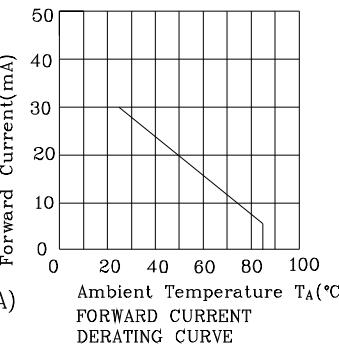
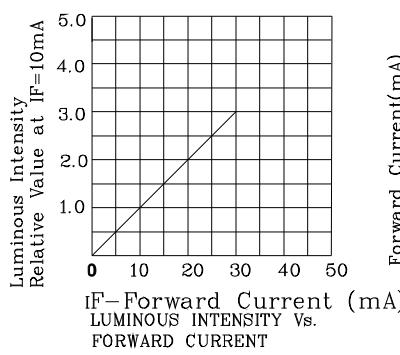
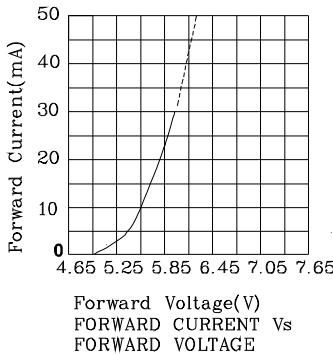
Operating Characteristics ( $T_A=25^\circ\text{C}$ )		MDK (AlGaInP)	Unit
Forward Voltage (Typ.) ( D <sub>p</sub> ) ( $I_F=10\text{mA}$ )	$V_F$	5.55 (1.85)	V
Forward Voltage (Max.) ( D <sub>p</sub> ) ( $I_F=10\text{mA}$ )	$V_F$	7.5 (2.5)	V
Reverse Current (Max.) (Per Chip) ( $V_R=5\text{V}$ )	$I_R$	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) ( $I_F=10\text{mA}$ )	$\lambda_P$	645*	nm
Wavelength of Dominant Emission CIE127-2007* (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 CIE127-2007* ( $I_F=10\text{mA}$ ) ucd	Wavelength CIE127-2007* nm $\lambda_P$	Description
XDMDK46A	Red	AlGaInP	150000 31000*	309990 89990*	645* Common Anode, Rt.Hand Decimal.

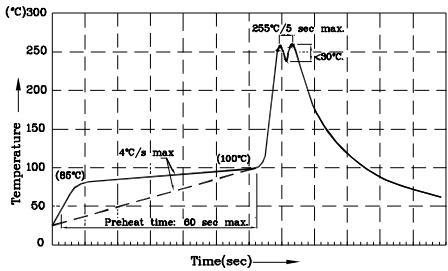
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.



### ◆ MDK



#### Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



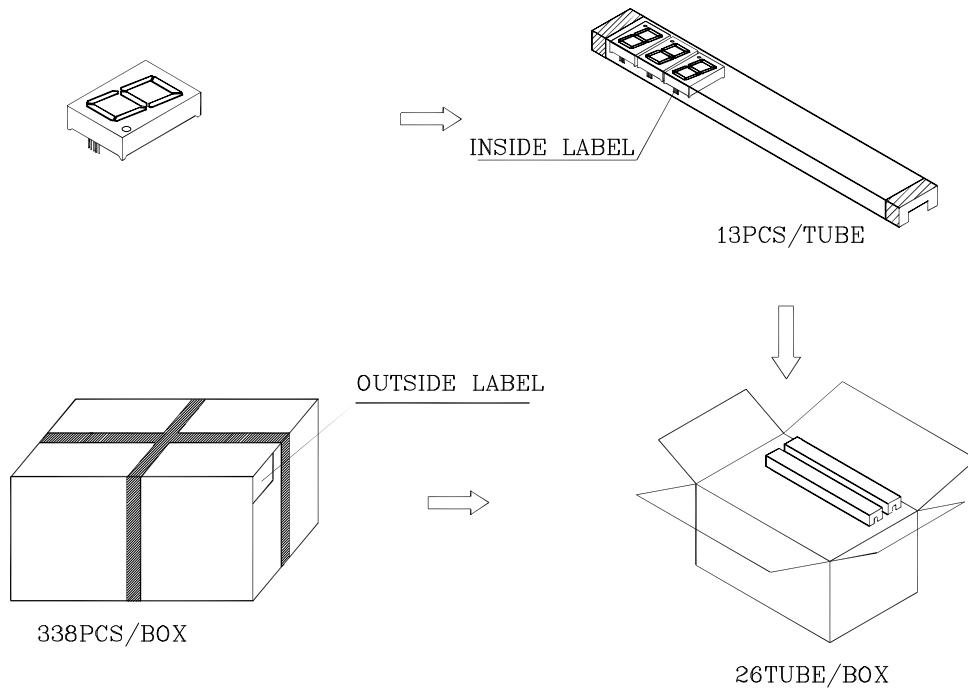
#### Remarks:

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:

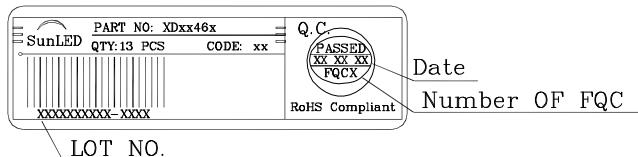
1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

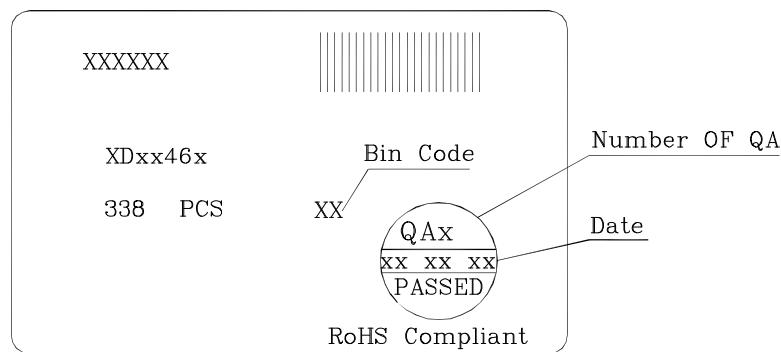
## PACKING & LABEL SPECIFICATIONS



Inside Label On IC-tube



Outside Label On Box



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