

Features

- Low power consumption
- Robust package
- I.C. Compatible

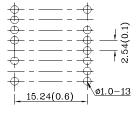
• Standard configuration: Gray face w/ white segments

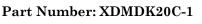
• Optional black face provides superior color contrast

• RoHS Compliant

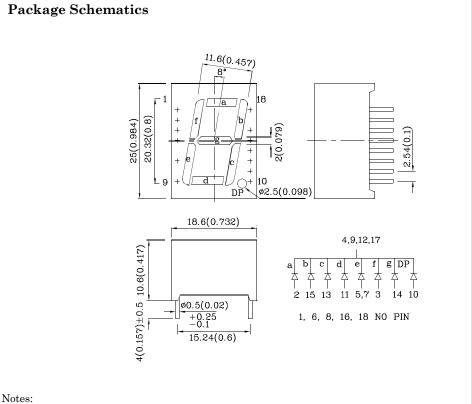


RECOMMENDED PCB LAYOUT





20.32mm (0.8") SINGLE DIGIT NUMERIC DIS-PLAY



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°C)		MDK (AlGaInP)	Unit	
Reverse Voltage	V_{R}	5	V	
Forward Current	$I_{\rm F}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	185	mA	
Power Dissipation	P_{D}	75	mW	
Operating Temperature	$T_{\rm A}$	$-40 \sim +85$	°C	
Storage Temperature	Tstg	$-40 \sim +85$		
Lead Solder Temperature [2mm Below Package Base]	260°C For 3-5 Seconds			

Operating Characteristics (T _A =25°C)		MDK (AlGaInP)	Unit
Forward Voltage (Typ.) (I _F =10mA)	$V_{\rm F}$	1.85	V
Forward Voltage (Max.) (I _F =10mA)	$V_{\rm F}$	2.5	V
Reverse Current (Max.) (V_R =5V)	I_{R}	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =10mA)	CIE127-2007* (Typ.) λP		nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =10mA)	λD	630*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =10mA)	$ riangle\lambda$	28	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	35	$_{\rm pF}$

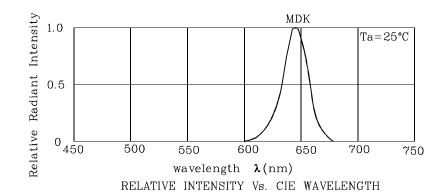
Part Number	Emitting Color	Emitting Material	Luminous Intensity CIE127-2007* (I _F =10mA) ucd	Wavelength CIE127-2007* nm λP	Description
			min. typ.		
XDMDK20C-1	Red	AlGaInP	31000 60990 9000* 18990*	645*	Common Cathode, Rt. Hand Decimal

*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Jan 17,2014

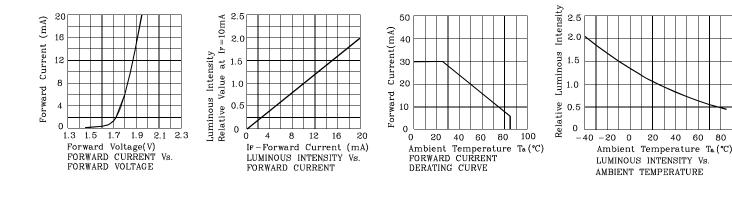
XDSB7704 V1-X Layout: Maggie L.



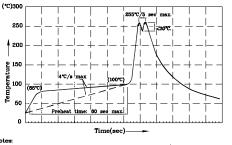
Part Number: XDMDK20C-1 20.32mm (0.8") SINGLE DIGIT NUMERIC DIS-PLAY



MDK



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



nmend pre-heat temperature of 105°C or less (as measured with a noccupie attached to the LED pins) prior to immersion in the solder with a maximum solder bath temperature of 260°C wave soldering temperature between $245°C \sim 255°C$ for 3 sec (5 sec 1. Rec the wave 2.Peak

 Peak wave soldering temperature between max).
Do not apply stress to the epoxy result.
Pixtures should not incur stress on the during soldering process.
SAC 305 solder alloy is recommended.
No more than one wave soldering pass. esin while the temperature is ab the component when mounting

Remarks:

If special sorting is required (e.g. binning based on forward voltage,

luminous intensity / luminous flux, or wavelength),

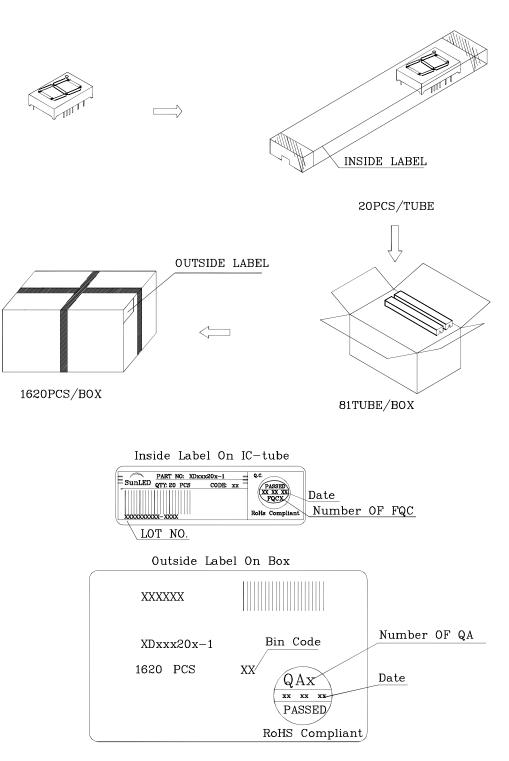
the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V
- Note: Accuracy may depend on the sorting parameters.

80



PACKING & LABEL SPECIFICATIONS



TERMS OF USE

- 1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
- 2. Contents within this document are subject to improvement and enhancement changes without notice.
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet. User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
- 4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please
- consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
- 5. The contents within this document may not be altered without prior consent by SunLED.
- 6. Additional technical notes are available at http://www.SunLEDusa.com/TechnicalNotes.asp