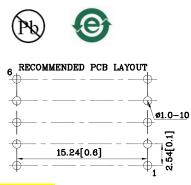


# Part Number: XDCBD14C

14.2mm (0.56") SINGLE DIGIT NUMERIC DIS-PLAY

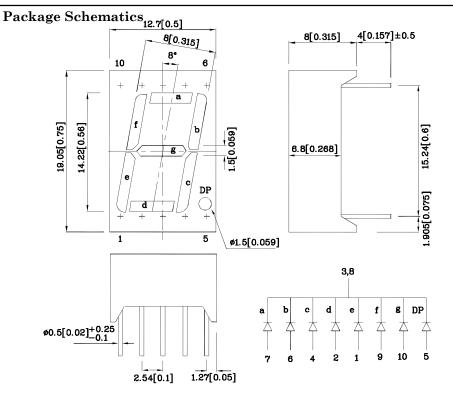
## Features

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





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES





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

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		CBD (InGaN)	Unit	
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$\mathbf{I}_{\mathrm{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	mA	
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	120	mW	
Operating Temperature	$T_{\rm A}$	$-40 \sim +85$	°C	
Storage Temperature	Tstg	$-40 \sim +85$		
Electrostatic Discharge Threshold (HBM)		250	v	
Lead Solder Temperature [2mm Below Package Base]	260°C For 3-5 Seconds			

Deperting Characteristics $T_A=25^{\circ}C$ )		CBD (InGaN)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\rm F}$	3	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	(I <sub>F</sub> =10mA) V <sub>F</sub> 4		V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	50	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λP	460*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λD	465*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$ riangle \lambda$	25	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	100	$_{\rm pF}$

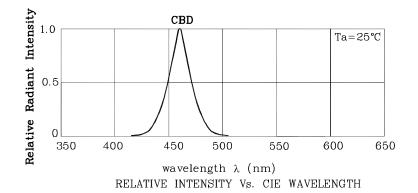
Part Number	Emitting Color	Emitting Material	Luminous Intensity CIE127-2007* (I <sub>F</sub> =10mA) ucd	Wavelength CIE127-2007* nm λP	Description
			min. typ.		
XDCBD14C	Blue	InGaN	9000* 23990*	460*	Common Cathode, Rt.Hand Decimal.

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

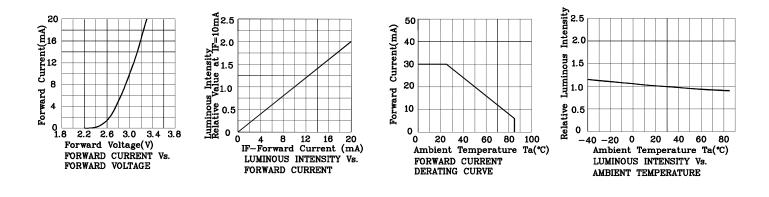
XDSB5052 V3-Z Layout: Maggie L.



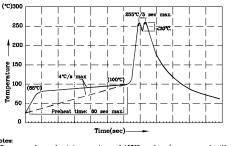
# Part Number: XDCBD14C 14.2mm (0.56") SINGLE DIGIT NUMERIC DIS-PLAY



### CBD



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



nmend pre-heat temperature of 105°C or less (as measured with a nocouple attached to the LED pins) prior to immersion in the solder with a maximum solder bath temperature of 280°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. while the temperature is all component when mounting sin the

#### Remarks:

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

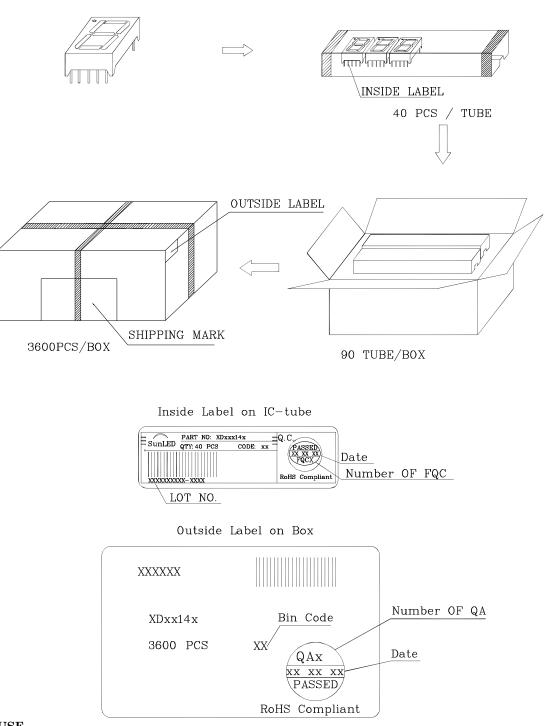
luminous intensity / luminous flux, or wavelength),

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**



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- 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
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