

# Part Number: XDCBD14C

 $14.2\mathrm{mm}$  (0.56") SINGLE DIGIT NUMERIC DIS-

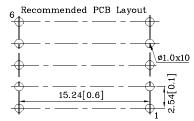
PLAY

## **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









# ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

# **Package Schematics** 12.7[0.5] 8[0.315] $4[0.157]\pm0.5$ 8[0.3<sub>15</sub>] 8° 10 а 19.05[0.75] 14.22[0.56] 15.24[0.6] 6.8[0.268] DP 5 ø1.5[0.059] 3,8

Notes:

1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25 (0.01")$  unless otherwise noted.

1.27[0.05]

2. Specifications are subject to change without notice.

2.54[0.1]

Ø0.5[0.02]+0.25 -0.1

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		Blue (InGaN)	Unit	
Reverse Voltage	$V_{\rm R}$	5	V	
Forward Current	$I_{\mathrm{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\mathrm{FS}}$	150	mA	
Power Dissipation	PD	120	mW	
Operating Temperature	$T_{A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85	-0	
Electrostatic Discharge Threshold (HBM)		250	V	
Lead Solder Temperature [2mm Below Package Base]	260°C For 3-5 Seconds			

A Relative Humidity between 40% and 60% is recommended in
ESD-protected work areas to reduce static build up during assembly
process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

Operating Characteristics (T <sub>A</sub> =25°C)		Blue (InGaN)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	3	V		
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	4	V	
Reverse Current (Max.) (V <sub>R</sub> =5V)	(Max.) (V <sub>R</sub> =5V) I <sub>R</sub>			
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λΡ	460*	nm	
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	a CIE127-2007* (Typ.) λD			
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$\triangle \lambda$	25	nm	
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	100	pF	

Part Number	Emitting Color	Emitting Material	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.

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

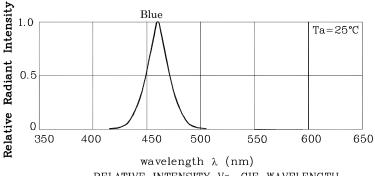
Oct 11,2016

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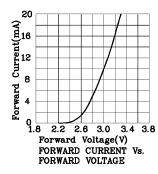
**PLAY** 

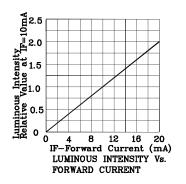


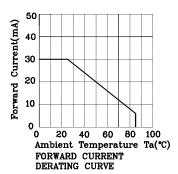


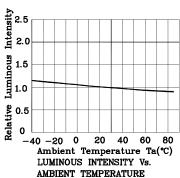
RELATIVE INTENSITY Vs. CIE WAVELENGTH

# ♦ Blue

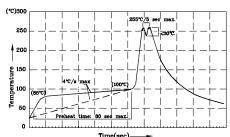








Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



- 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 260°C wave soldering temperature between 245°C ~ 255°C for 3 sec (5 sec
- 2.Peak wave soldering temperature between 245°C ~ 255°C for 3 secmax).
  3.Do not apply stress to the epoxy resin while the temperature is a 4.Fixtures should not incur stress on the component when mounting during soldering process.
  5.SAC 305 solder alloy is recommended.
  6.No more than one wave soldering pass.
  7.During wave soldering, the PCB top-surface temperature should be kept below 105°C. while the temperature is at

# 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:

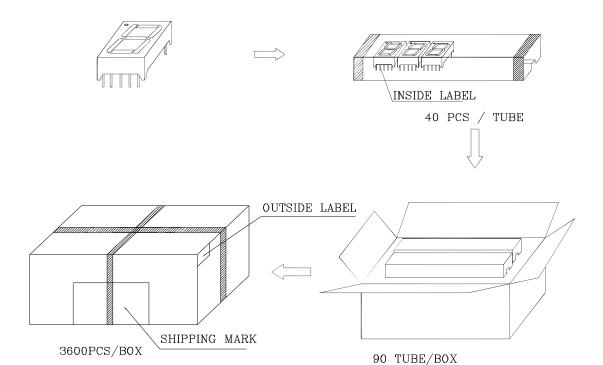
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

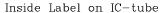
Note: Accuracy may depend on the sorting parameters.

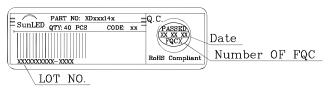
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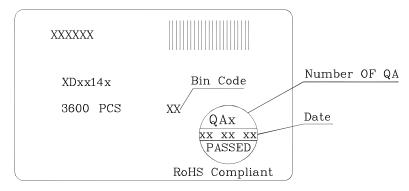
# PACKING & LABEL SPECIFICATIONS







# Outside Label on Box



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