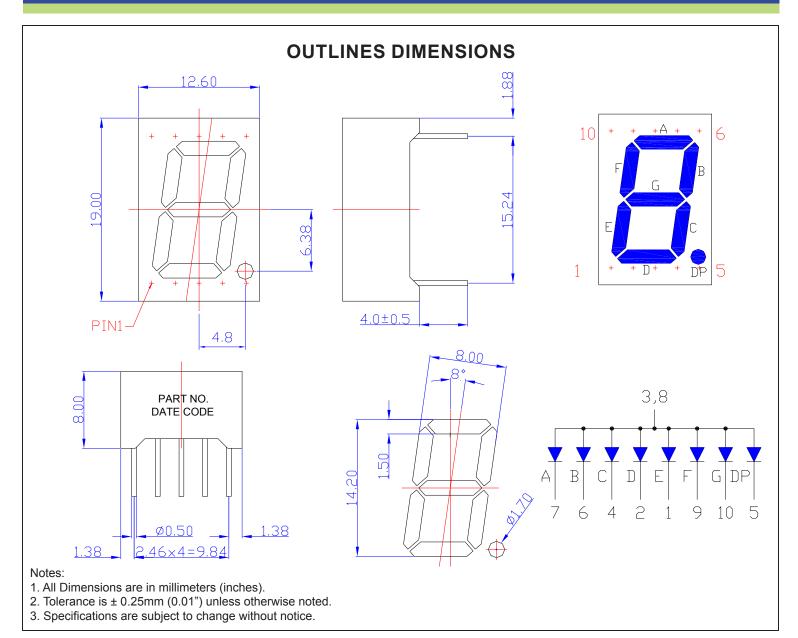


# SPECIFICATIONS CDSA56B1WBF



Part Number	Chip Material	Color of Emission	Segment/Face	Description	
CDSA56B1WBF	InGaN	Blue	White/Black	Common Anode	





### **ABSOLUTE MAXIMUM RATINGS**

(TA=25°C)

Parameter	Symbol	Max Rating	Unit			
Power Dissipation	Pb	120	mW			
Pulse Forward Current	lFP	100	mA			
Continuous Forward Current	lF	30	mA			
Reverse Voltage Segment	VR	5	V			
Operating Temperature Range	Topr	-25~+85	°C			
Storage Temperature Range	Тѕтс	-25~+85	°C			
IFP = Pulse Width ≤ 10 ms, Duty Ratio ≤1/10. Soldering Condition: 260 °C/ 5sec						

## **OPTICAL-ELECTRICAL CHARACTERISTICS**

(TA=25°C)

Parameter	Symbol	Toot Condition	Value			Lloit
Parameter		Test Condition	Min	Тур	Max	Unit
Luminous Intensity	lv	I <sub>F</sub> = 20mA	-	40	-	mcd
Forward Voltage	VF	I⊧ = 20mA	-	3.0	4.0	V
Reverse Leakage Current	lR	V <sub>R</sub> = 8V	-	-	10	μA
Peak Wavelength	λР	I⊧ = 20mA	-	470	-	nm
Dominant Wavelength	λD	I⊧ = 20mA	460	465	470	nm
Spectral Radiation Bandwidth	Δλ	I⊧ = 20mA	-	30	-	nm



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#### **OPTICAL CHARACTERISTIC CURVES**

# (25 °C Free Air Temperature Unless Otherwise Specified)

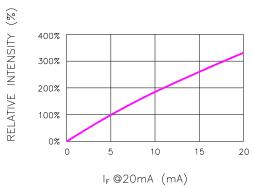
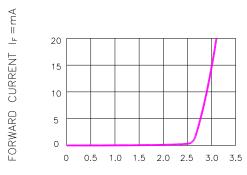
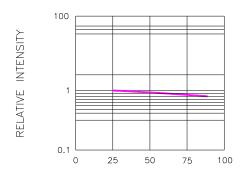


Fig.1 RELATIVE INTENSITY VS. FORWARD CURRENT



FORWARD VOLTAGE (V)
Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE



LEAD TEMPERATURE(°C)
Fig.3 RELATIVE INTENSITY VS.LEAD TEMPERATURE

(PULSED 20 mA; 300us
PULSE,10ms PERIOD)



FORWARD VOLTAGE(V)

Fig.4 PEAK FORWARD VOLTAGE

VS.FORWARD(100us TEST PULSE,

1% DUTY CYCLE)

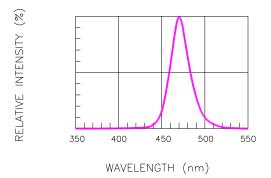
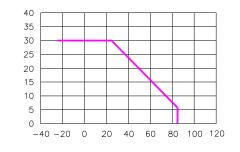


Fig.5 RELATIVE INTENSITY VS. WAVELENGTH



AMBIENT TEMPERATURE (TA)-°C
Fig.6 MAX. ALLOWABLE DC CURRENT
VS. AMBIENT TEMPERATURE

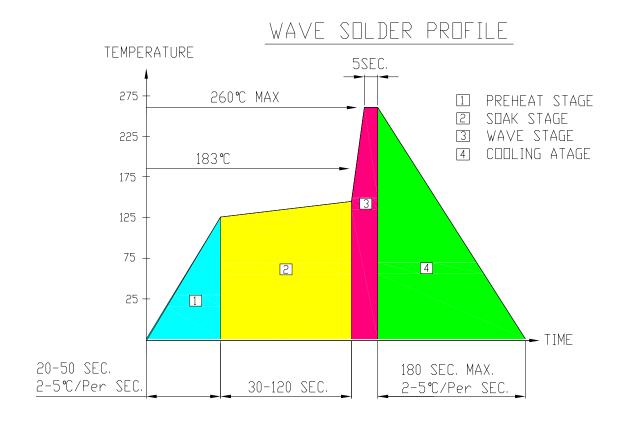


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#### **SOLDERING CONDITIONS - DISPLAY TYPE LED**

#### RECOMMEND SOLDERING PROFILE



### SOLDERING IRON

Basic spec is ≦4 sec when 260°C. If temperature is higher, time should be shorter (+10°C→1 sec). Power dissipation of Iron should be smaller than 15W, and temperature should be controllable. Surface temperature of the device should be under 230°C.

# REWORK

Customer must finish rework within ≦4 sec under 245°C.

