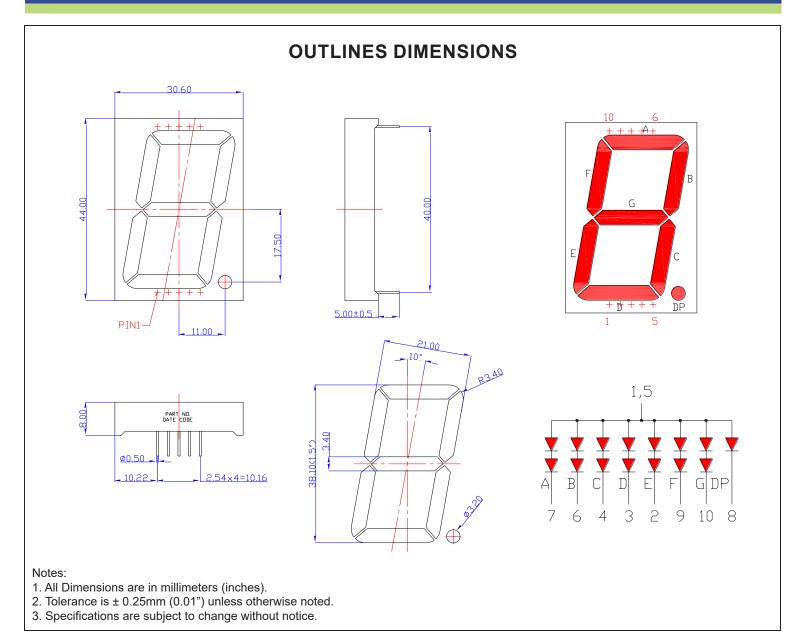


# SPECIFICATIONS CDSA15R21WB



Part Number	Chip Material	Color of Emission	Lens / Face	Description	
CDSA15R21WB	InGaAlP	Red	White / Black	Common Anode	





### **ABSOLUTE MAXIMUM RATINGS**

(TA=25°C)

Parameter	Symbol	Max Rating	Unit			
Power Dissipation	Pb	70	mW			
Pulse Forward Current	lFP	90	mA			
Continuous Forward Current	lF	25	mA			
Reverse Voltage Segment	VR	5	V			
Operating Temperature Range	Topr	-25~+85	°C			
Storage Temperature Range	Тѕтс	-25~+85	°C			
p = Pulse Width ≤ 10 ms, Duty Ratio ≤1/10. Soldering Condition: 260 °C/ 5sec						

## **OPTICAL-ELECTRICAL CHARACTERISTICS**

(TA=25°C)

Deremeter	Symbol	Toot Condition	Value			Lloit
Parameter		Test Condition	Min	Тур	Max	Unit
Luminous Intensity	lv	I <sub>F</sub> = 20mA	-	80	-	mcd
Forward Voltage	VF	I <sub>F</sub> = 20mA	1	4.0	5.2	V
Reverse Leakage Current	lR	V <sub>R</sub> = 5V	-	1	10	μΑ
Peak Wavelength	λР	I <sub>F</sub> = 20mA	-	632	-	nm
Dominant Wavelength	λD	I <sub>F</sub> = 20mA	-	625	-	nm
Spectral Radiation Bandwidth	Δλ	I⊧ = 20mA	-	20	-	nm





#### **OPTICAL CHARACTERISTIC CURVES**

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

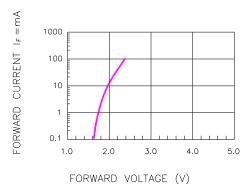
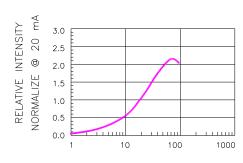


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE



FORWARD CURRENT (mA)
Fig.2 RELATIVE INTENSITY VS. FORWARD CURRENT

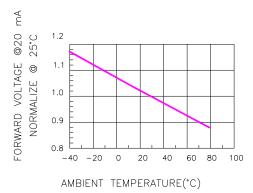


Fig.3 FORWARD VOLTAGE VS. TEMPERATURE

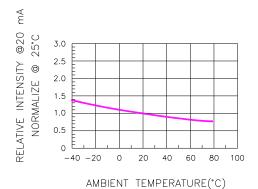


Fig.4 RELATIVE INTENSITY VS. TEMPERATURE

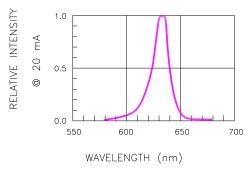
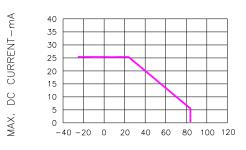


Fig.5 RELATIVE INTENSITY VS. WAVELENGTH



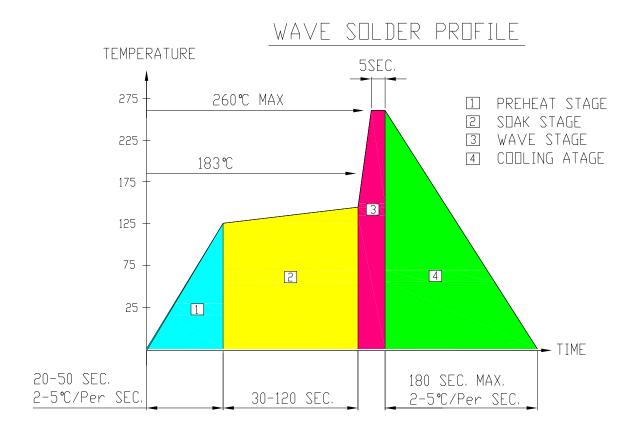
AMBIENT TEMPERATURE (TA)-\*C
Fig.6 MAX. ALLOWABLE DC CURRENT
VS. AMBIENT TEMPERATURE





#### **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.

