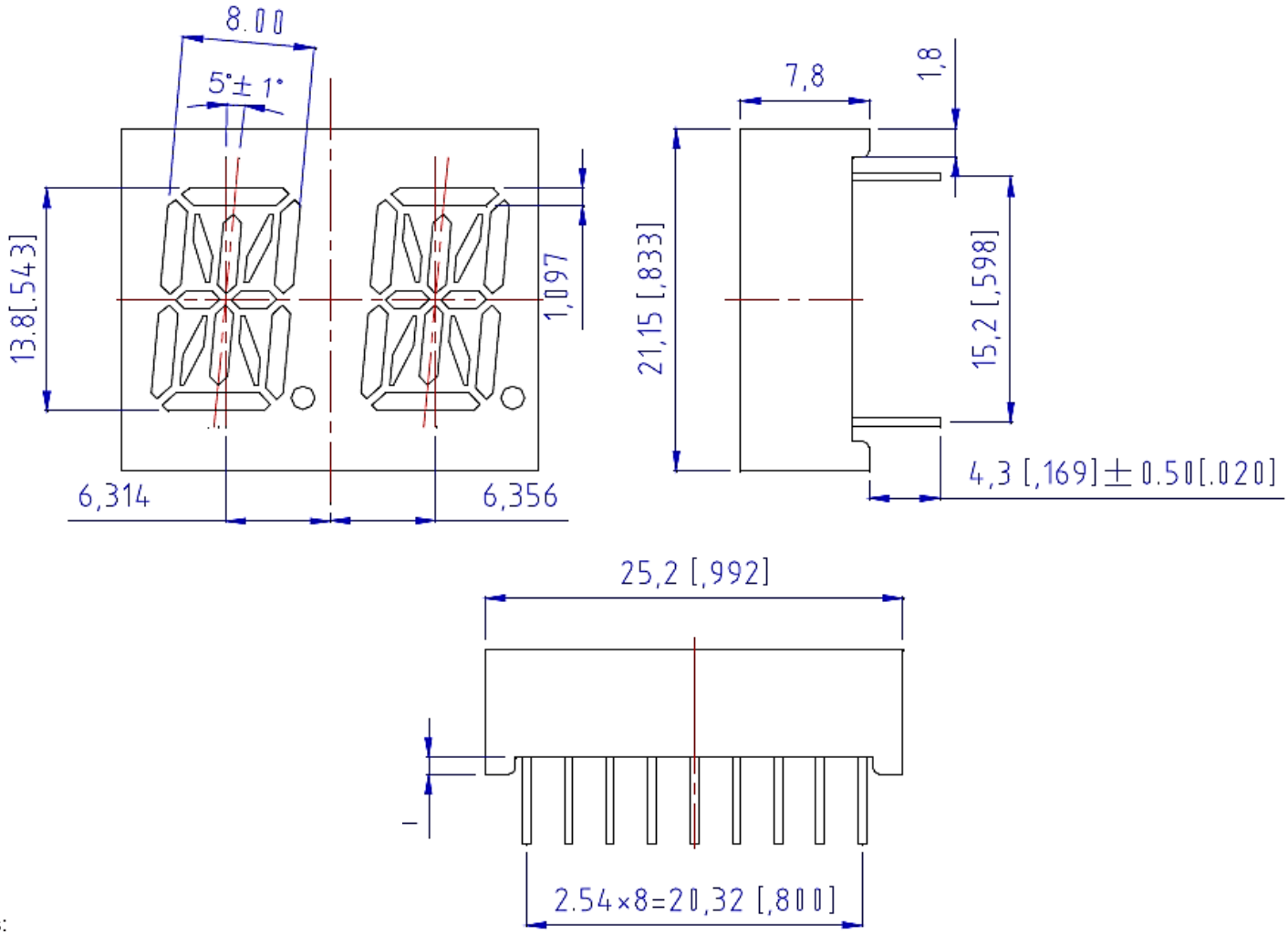
SPECIFICATIONS CDDCN54B2W

OUTLINES DIMENSIONS



Notes:
1. All Dimensions are in millimeters (inches).
2. Tolerance is ± 0.25mm (0.01”) unless otherwise noted.
3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Description
CDDCN54B2W	InGaN	Blue	White Segment	Common Cathode

ABSOLUTE MAXIMUM RATINGS (TA=25°C)

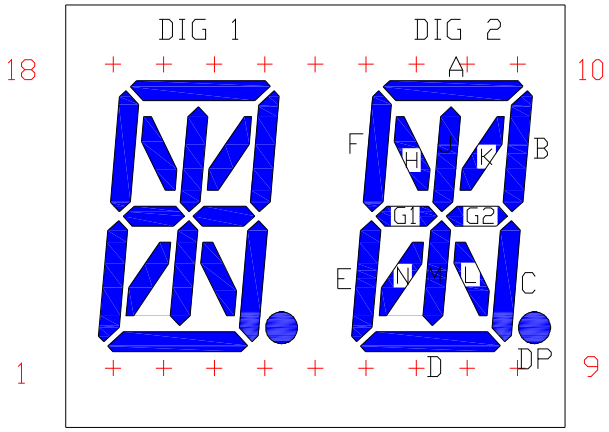
Parameter	Symbol	Max Rating	Unit
Power Dissipation	P_D	114	mW
Pulse Forward Current	I_{FP}	100	mA
Continuous Forward Current	I_F	30	mA
Reverse Voltage Segment	V_R	5	V
Operating Temperature Range	T_{OPR}	-35~+85	°C
Storage Temperature Range	T_{STG}	-35~+85	°C
I_{FP} = Pulse Width ≤ 10 ms, Duty Ratio ≤1/10. Soldering Condition: 260 °C/ 5sec			

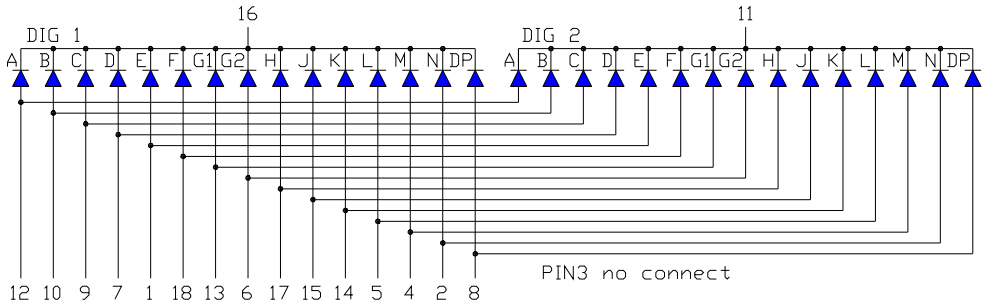
OPTICAL-ELECTRICAL CHARACTERISTICS (TA=25°C)

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	I_V	I_F = 20mA	11	28	-	mcd
Forward Voltage	V_F	I_F = 20mA	-	3.2	3.8	V
Reverse Leakage Current	I_R	V_R = 5V	-	-	50	μA
Peak Wavelength	λ_P	I_F = 20mA	-	470	-	nm
Dominant Wavelength	λ_D	I_F = 20mA	465	470	475	nm
Spectral Radiation Bandwidth	$\Delta\lambda$	I_F = 20mA	-	20	-	nm

RoHS Compliant Lead Free

TYPICAL INTERNAL EQUIVALENT CIRCUIT





OPTICAL CHARACTERISTIC CURVES

Typical Electro-optical Characteristic Curves
(25 ℃ Free Air Temperature Unless Otherwise Specified)

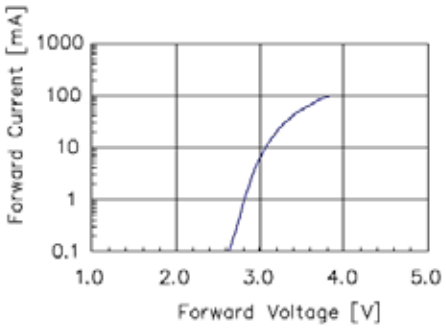


Fig 1. Forward Current vs. Forward Voltage

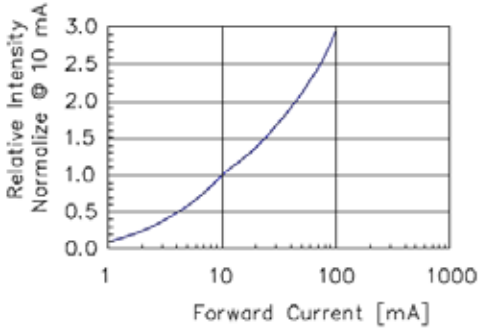


Fig 2. Relative Intensity vs. Forward Current

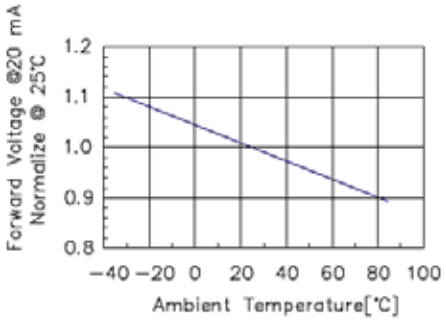


Fig 3. Forward Voltage vs. Temperature

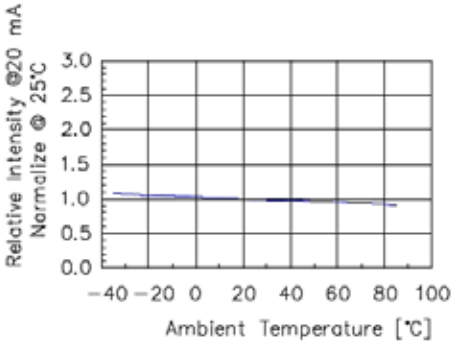


Fig 4. Relative Intensity vs. Temperature

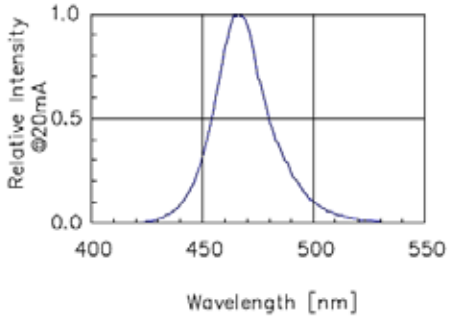
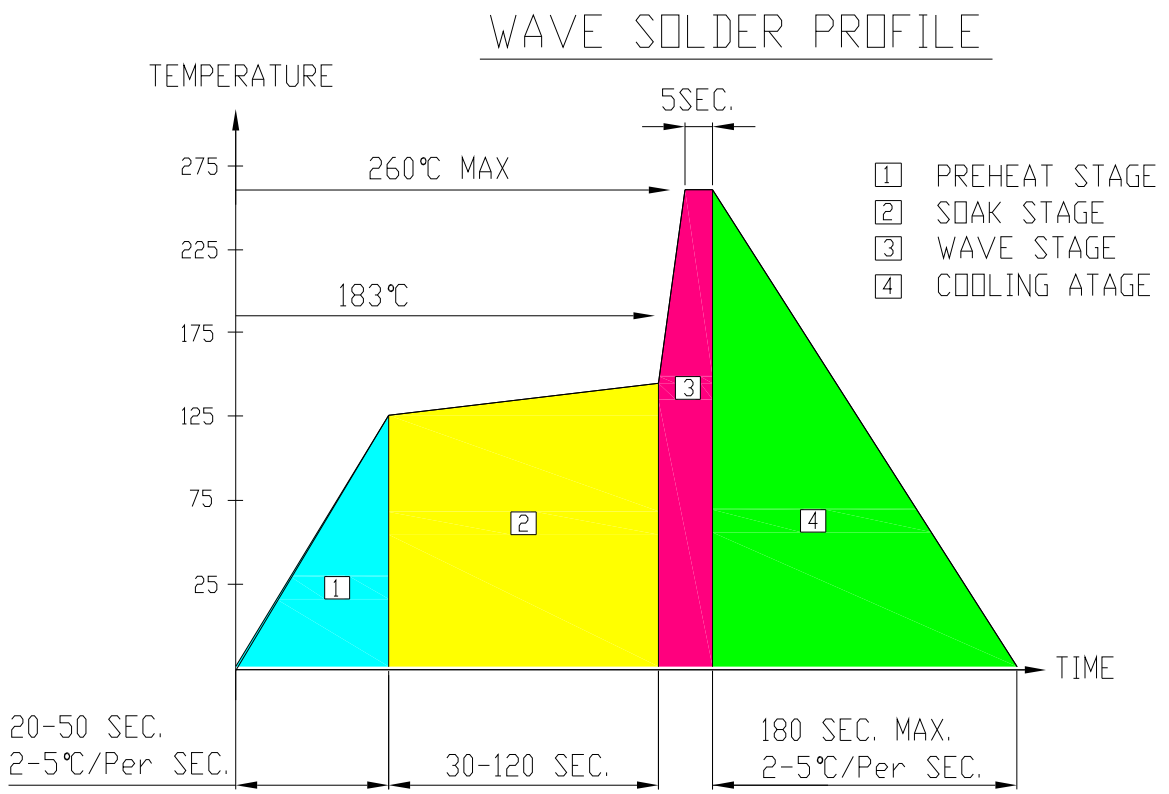


Fig 5. Relative Intensity Vs. Wavelength

SOLDERING CONDITIONS – DISPLAY TYPE LED



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℃.