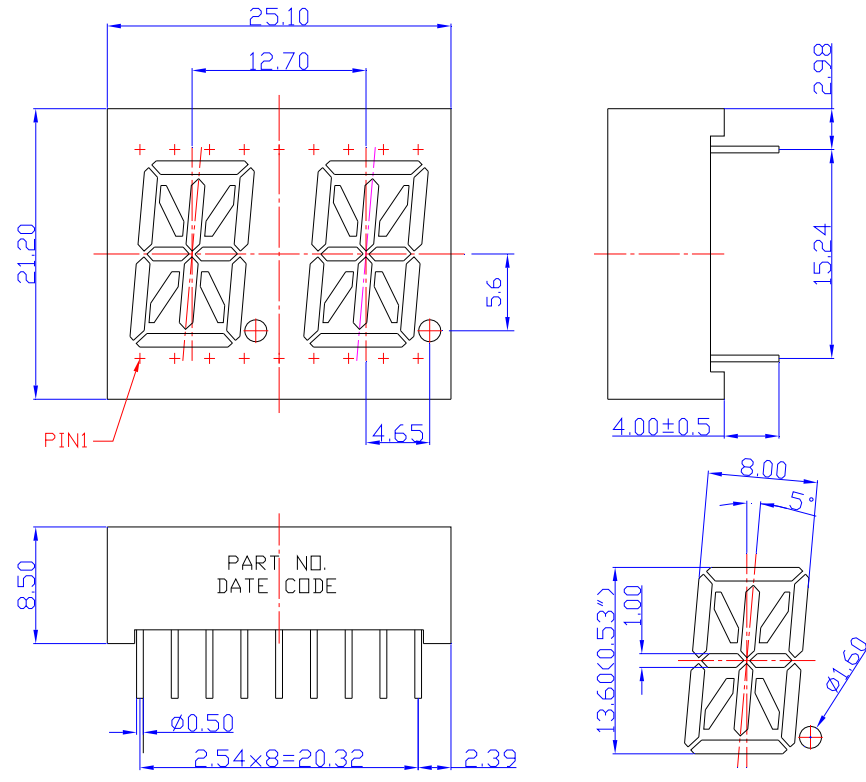


SPECIFICATIONS **CDDCN54A2W**

OUTLINES DIMENSIONS



The technical drawings show the following dimensions:

- Top View:** Overall width 25.10mm, overall height 21.20mm. The two LED chips are spaced 12.70mm apart. Each chip is 4.65mm wide and 5.6mm high. A PIN1 indicator is shown at the bottom left.
- Side View:** Total height 15.24mm, with a top section of 2.98mm and a bottom section of 4.00±0.5mm.
- Bottom View:** Shows a rectangular area with a height of 8.50mm and a width of 2.54x8=20.32mm. A diameter of 0.50mm is indicated for the mounting holes. A 2.39mm dimension is shown at the bottom right. The top surface contains markings for PART NO., DATE, and CODE.
- Isometric View:** Shows the LED chip with a height of 1.00mm, a width of 8.00mm, and a depth of 13.60(0.533"). A diameter of 1.60mm is indicated for the chip base.

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
CDDCN54A2W	InGaAlP	Amber	White Segment	Common Cathode



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

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

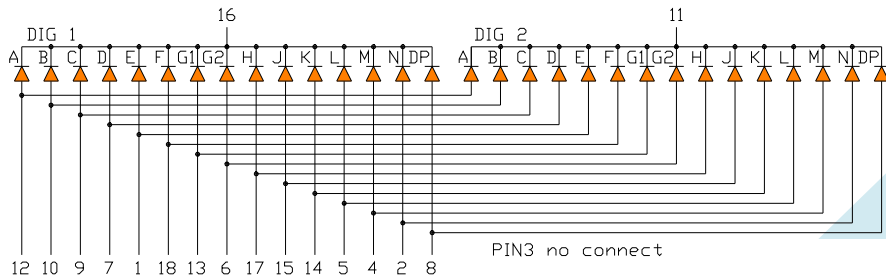
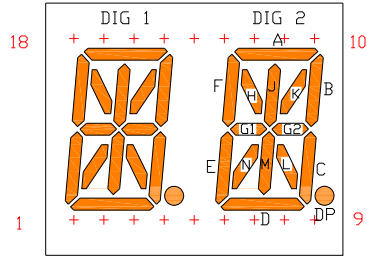
OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	IV	IF = 20mA	-	60	-	mcd
Forward Voltage	VF	IF = 20mA	-	2.0	2.6	V
Reverse Leakage Current	IR	VR = 5V	-	-	10	µA
Peak Wavelength	λP	IF = 20mA	-	610	-	nm
Dominant Wavelength	λD	IF = 20mA	-	606	-	nm
Spectral Radiation Bandwidth	Δλ	IF = 20mA	-	35	-	nm



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TYPICAL INTERNAL EQUIVALENT CIRCUIT



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OPTICAL CHARACTERISTIC CURVES

(25 °C Free Air Temperature Unless Otherwise Specified)

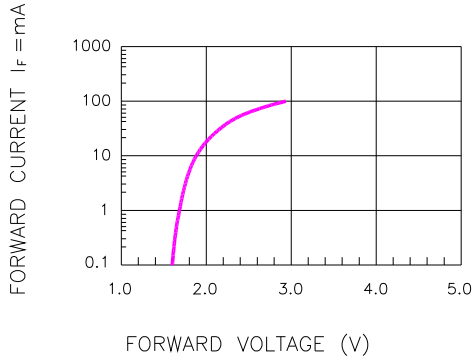


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

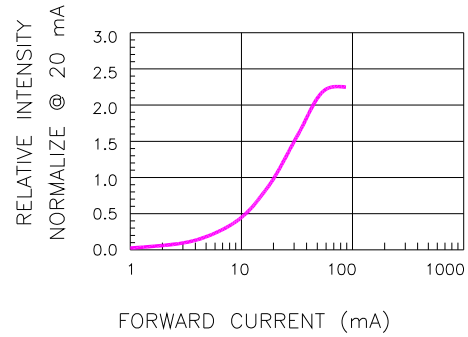


Fig.2 RELATIVE INTENSITY VS. FORWARD CURRENT

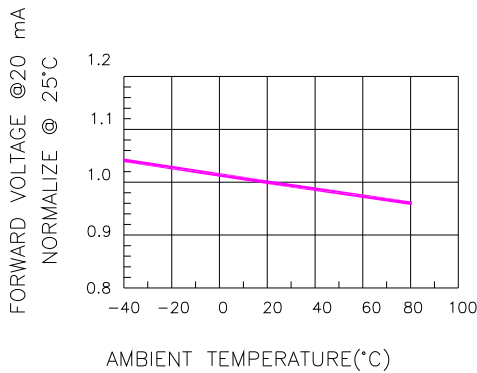


Fig.3 FORWARD VOLTAGE VS. TEMPERATURE

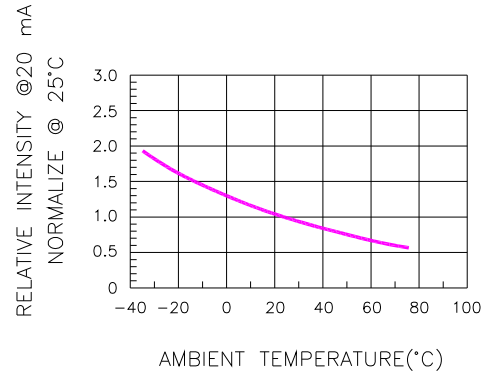


Fig.4 RELATIVE INTENSITY VS. TEMPERATURE

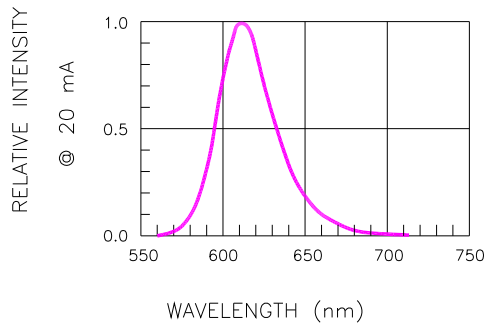


Fig.5 RELATIVE INTENSITY VS. WAVELENGTH

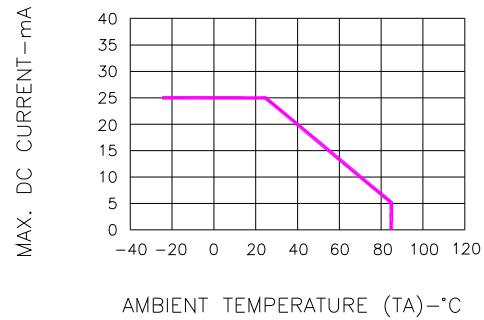


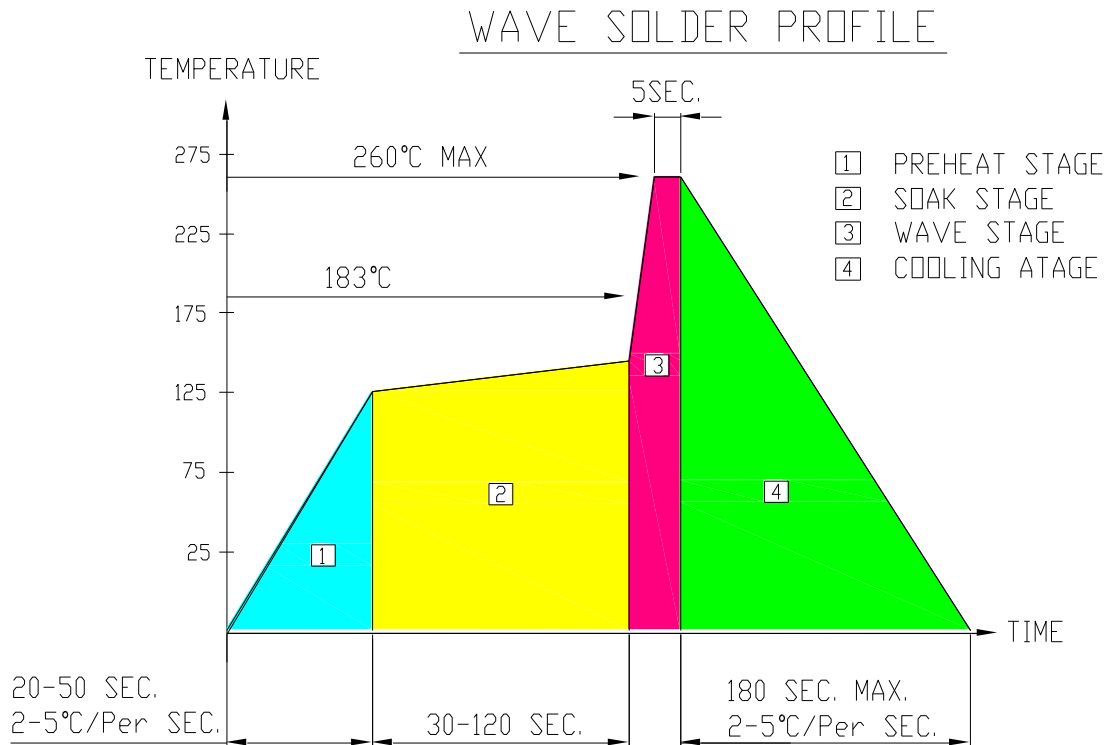
Fig.6 MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE



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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.



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