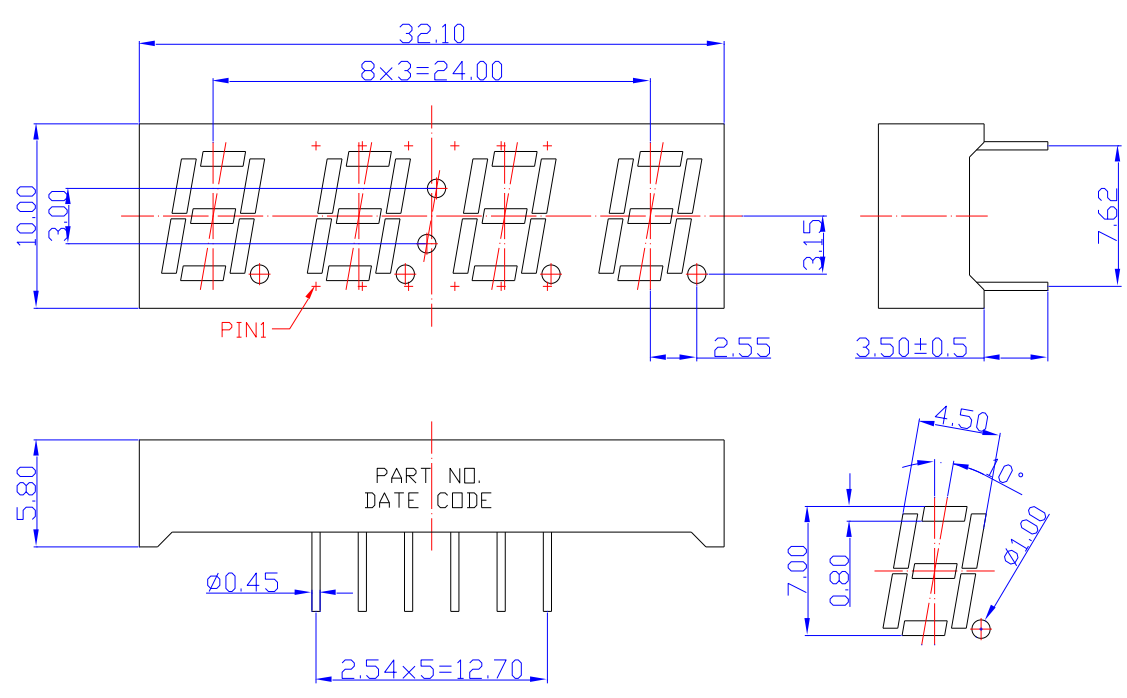


**SPECIFICATIONS** **CDQA28G2W**

### OUTLINES DIMENSIONS



The drawing shows the following dimensions:

- Top view: Total length 32.10, LED array length 8x3=24.00, total width 10.00, mounting pad width 3.00, distance from pad to LED array 2.55, and distance from LED array to mounting pad 3.15.
- Side view: Total height 7.62, mounting pad height 3.50±0.5.
- Bottom view: Mounting pad diameter Ø0.45, distance between pads 2.54x5=12.70, and a marking area containing 'PART NO.', 'DATE', and 'CODE'.
- Detail view: LED chip width 4.50, height 0.80, mounting pad diameter Ø1.00, and a 10° angle.

**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
CDQA28G2W	InGaAlP	Green	White Segment	Common Anode



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**ABSOLUTE MAXIMUM RATINGS**
**(TA=25°C)**

Parameter	Symbol	Max Rating	Unit
Power Dissipation	PD	85	mW
Pulse Forward Current	IFP	120	mA
Continuous Forward Current	IF	30	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			

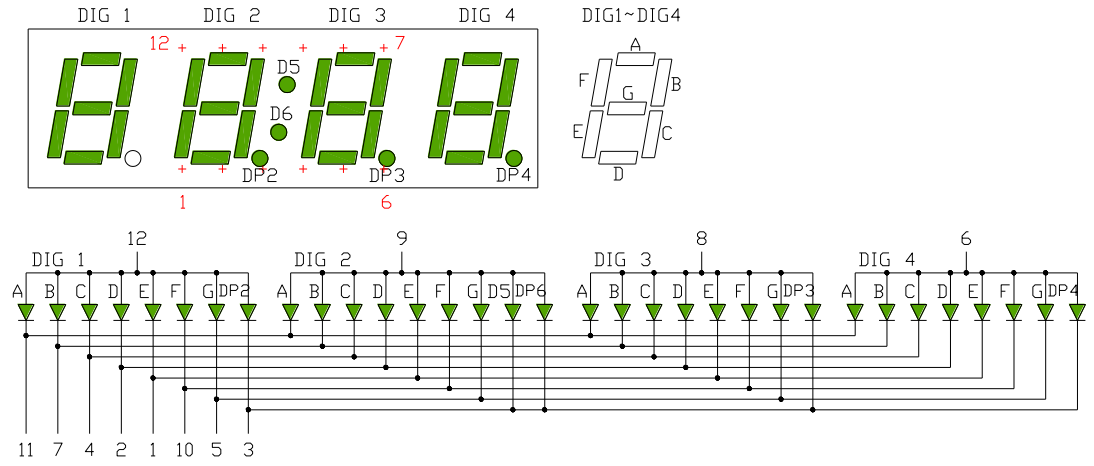
**OPTICAL-ELECTRICAL CHARACTERISTICS**
**(TA=25°C)**

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	IV	IF = 20mA	-	20	-	mcd
Forward Voltage	VF	IF = 20mA	-	2.1	2.6	V
Reverse Leakage Current	IR	VR = 5V	-	-	10	µA
Peak Wavelength	λP	IF = 20mA	-	573	-	nm
Dominant Wavelength	λD	IF = 20mA	566	571	574	nm
Spectral Radiation Bandwidth	Δλ	IF = 20mA	-	20	-	nm



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## TYPICAL INTERNAL EQUIVALENT CIRCUIT



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## OPTICAL CHARACTERISTIC CURVES

(25 °C Free Air Temperature Unless Otherwise Specified)

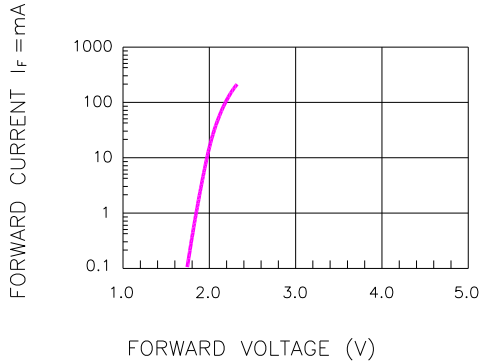


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

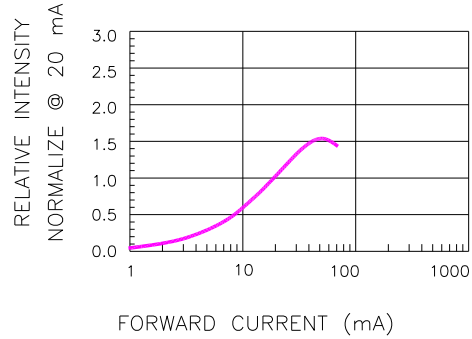


Fig.2 RELATIVE INTENSITY VS. FORWARD CURRENT

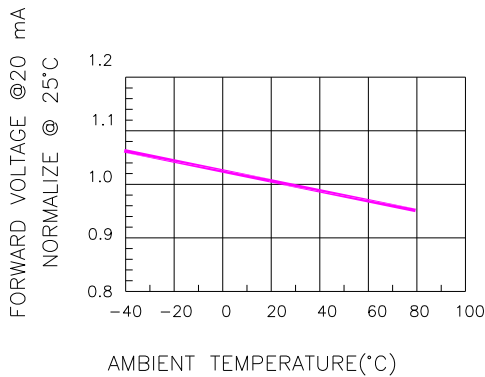


Fig.3 FORWARD VOLTAGE VS. TEMPERATURE

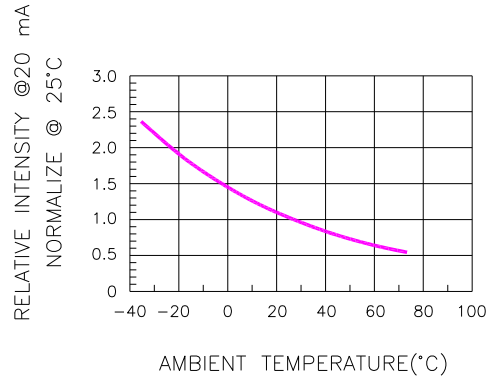


Fig.4 RELATIVE INTENSITY VS. TEMPERATURE

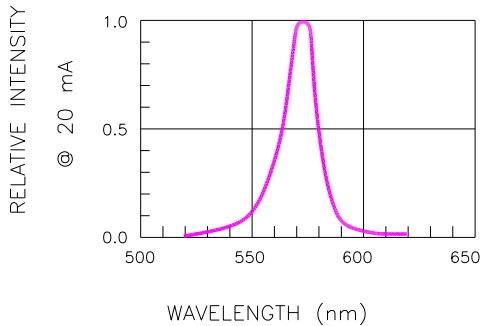


Fig.5 RELATIVE INTENSITY VS. WAVELENGTH

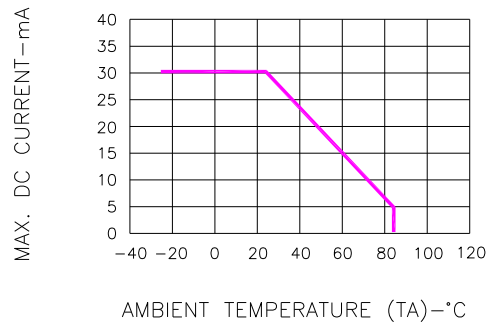
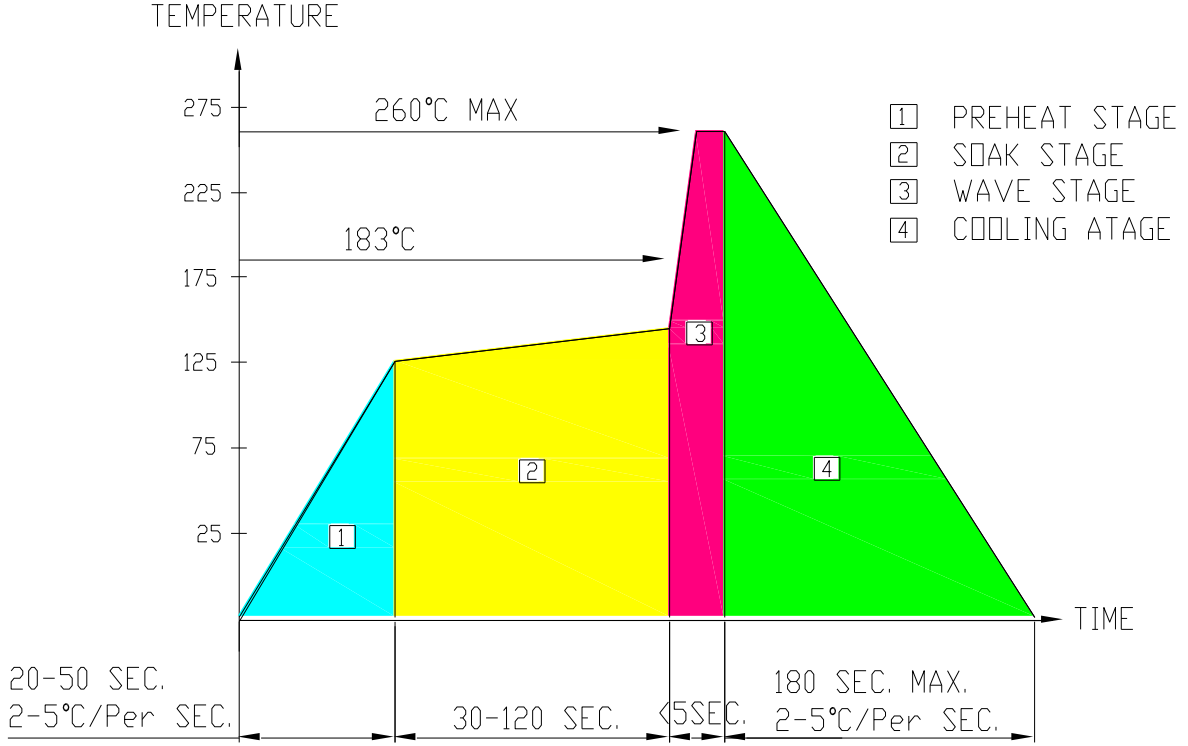


Fig.6 MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE



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**SOLDERING CONDITIONS – DISPLAY TYPE LED**
**● RECOMMEND SOLDERING PROFILE**
WAVE SOLDER PROFILE

**● SOLDERING IRON**

Basic spec is  $\leq 4$  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  $\leq 4$  sec under 245°C.



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