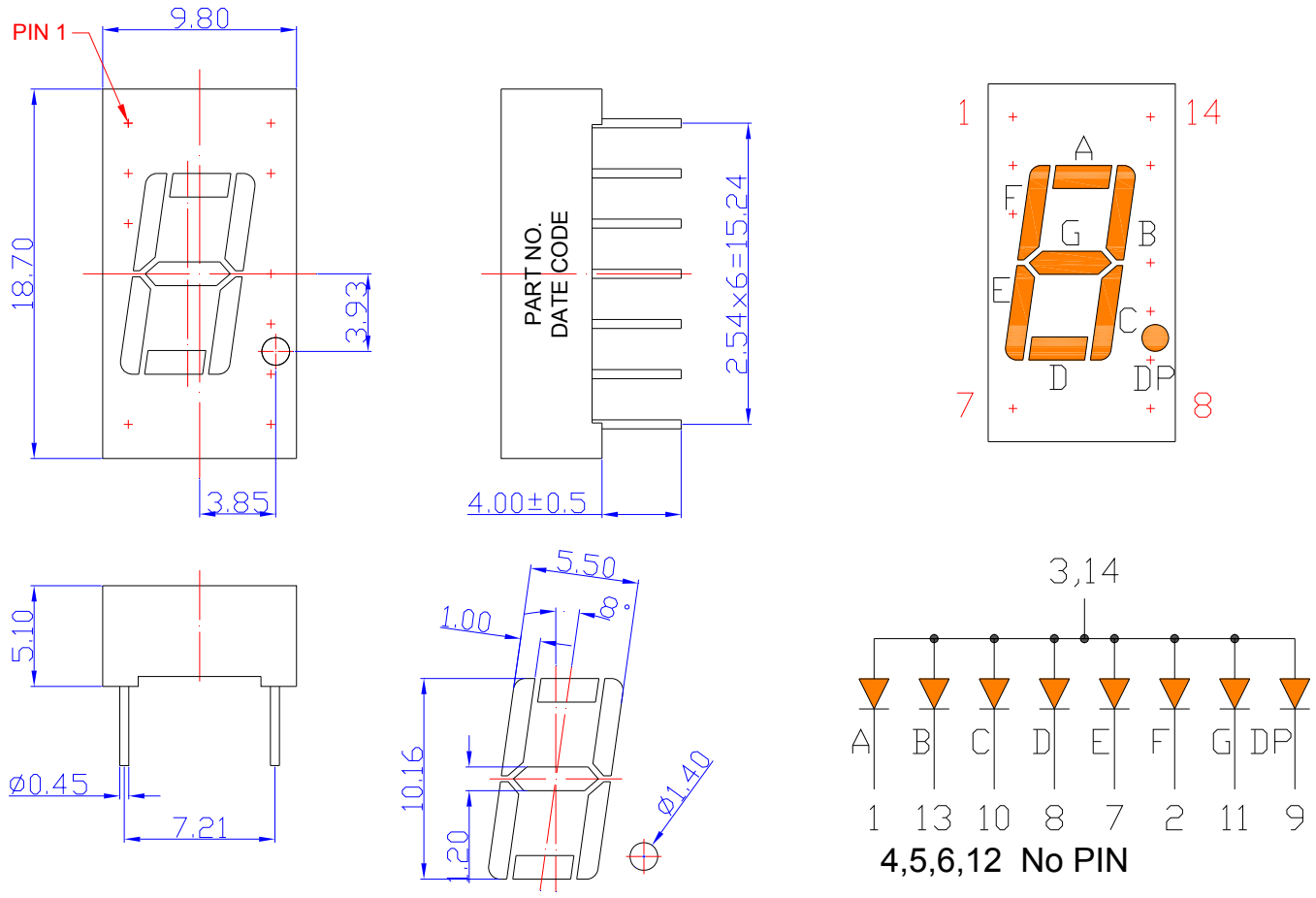
## SPECIFICATIONS CDSA40A2W

### 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 |
|---|---|---|---|---|
| CDSA40A2W | InGaAlP | Amber | White Segment | Common Anode |

RoHS Compliant Lead Free

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## ABSOLUTE MAXIMUM RATINGS (TA=25°C)

| Parameter | Symbol | Max Rating | Unit |
|---|---|---|---|
| Power Dissipation | $P_D$ | 70 | mW |
| Pulse Forward Current | $I_{FP}$ | 90 | mA |
| Continuous Forward Current | $I_F$ | 25 | mA |
| Reverse Voltage Segment | $V_R$ | 5 | V |
| Operating Temperature Range | $T_{OPR}$ | -25~+85 | °C |
| Storage Temperature Range | $T_{STG}$ | -25~+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 | - | 40 | - | mcd |
| Forward Voltage | $V_F$ | $I_F$ = 20mA | - | 2.0 | 2.6 | V |
| Reverse Leakage Current | $I_R$ | $V_R$ = 5V | - | - | 10 | μA |
| Peak Wavelength | $\lambda_P$ | $I_F$ = 20mA | - | 610 | - | nm |
| Dominant Wavelength | $\lambda_D$ | $I_F$ = 20mA | - | 606 | - | nm |
| Spectral Radiation Bandwidth | $\Delta\lambda$ | $I_F$ = 20mA | - | 30 | - | nm |

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# OPTICAL CHARACTERISTIC CURVES

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

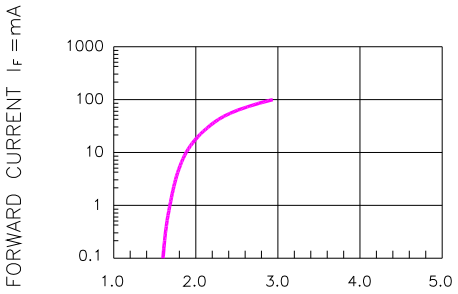



Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

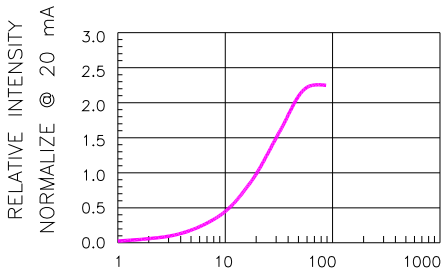



Fig.2 RELATIVE INTENSITY VS. FORWARD CURRENT

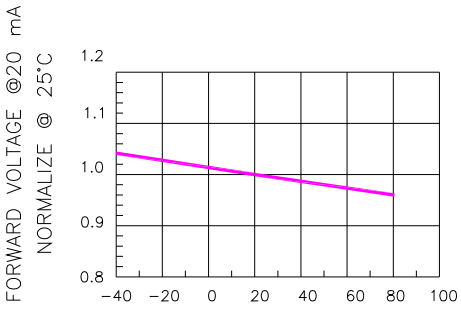



Fig.3 FORWARD VOLTAGE VS. TEMPERATURE

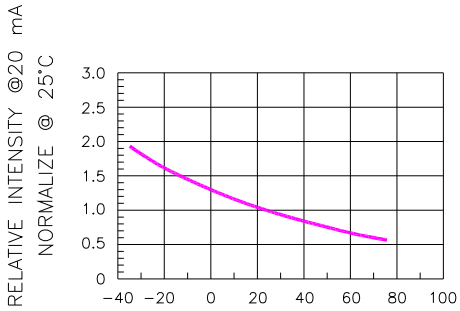



Fig.4 RELATIVE INTENSITY VS. TEMPERATURE

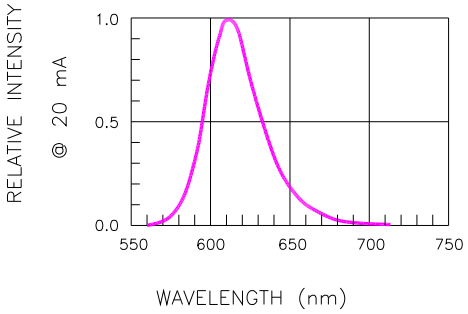



Fig.5 RELATIVE INTENSITY VS. WAVELENGTH

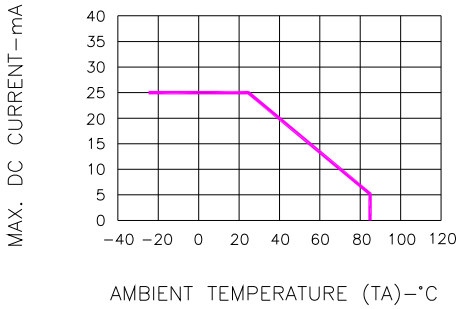
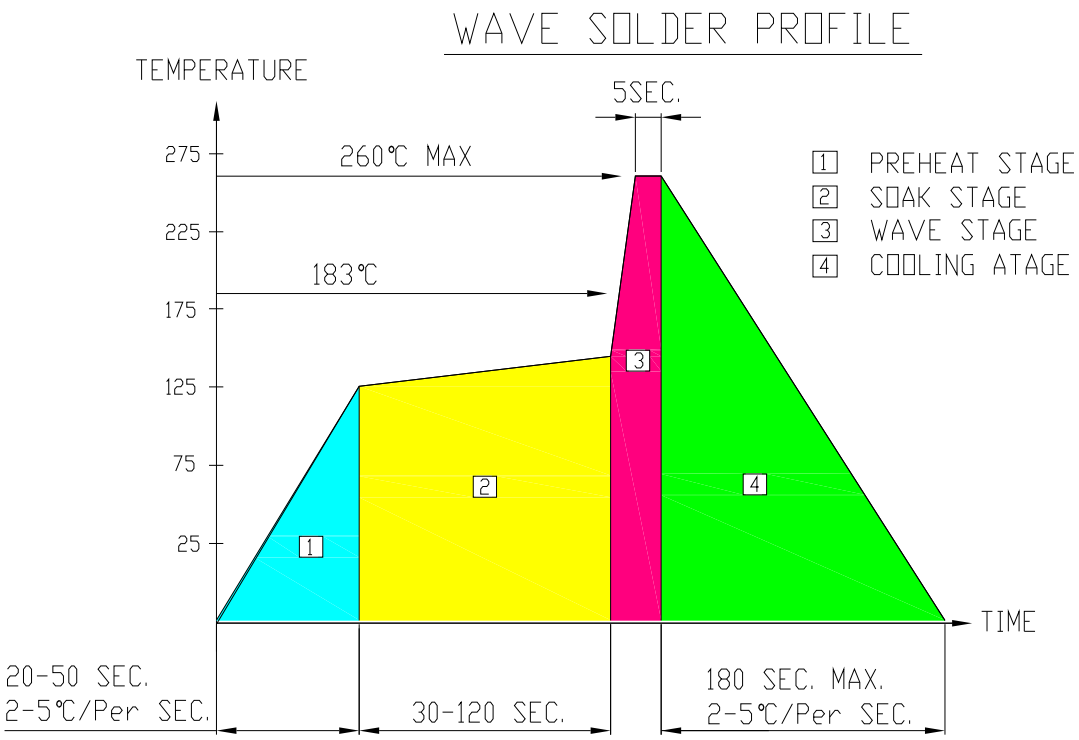



Fig.6 MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE

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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℃.

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