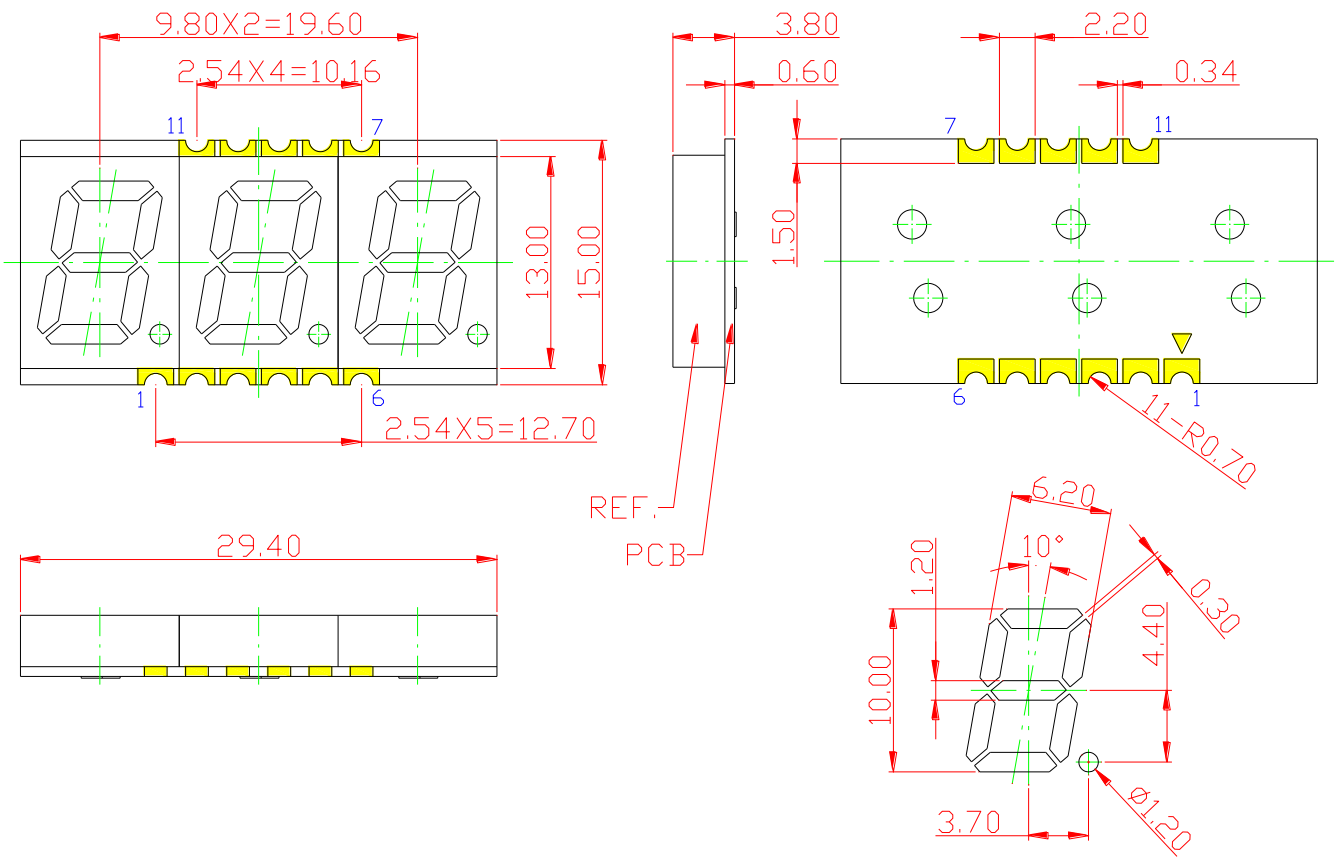


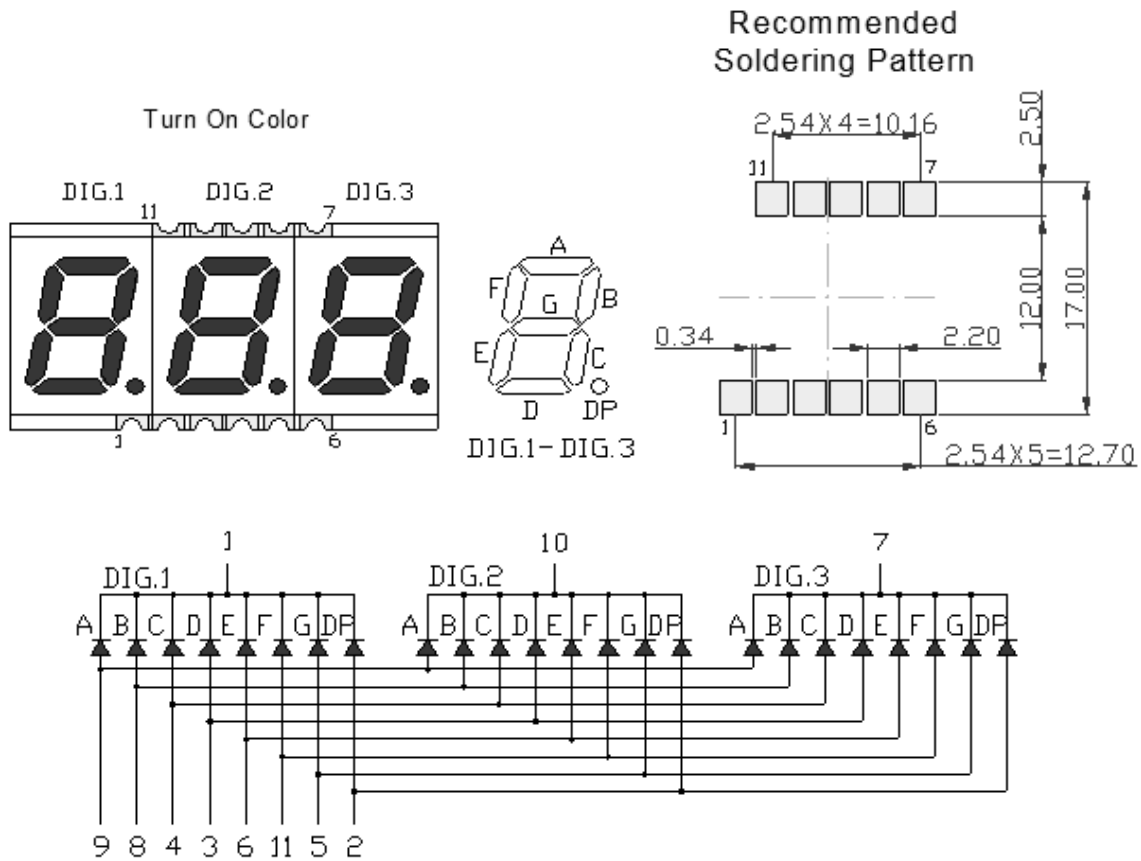
SPECIFICATIONS **SDTC39B2W**
MECHANICAL DIMENSIONS


- Notes:
1. All dimensions are in millimeters (inches).
 2. Tolerance is $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
 3. Specifications are subject to change without notice.

| Part Number | Chip Material | Color of Emission | Lens Type | Description |
|-------------|---------------|-------------------|---------------|----------------|
| SDTC39B2W | InGaN | Blue | White Segment | Common Cathode |



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SPECIFICATIONS
TYPICAL INTERNAL EQUIVALENT CIRCUIT

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

| Parameter | Symbol | | Unit |
|---|--------|----------|---------|
| Power Dissipation per Dice | PAD | 90 | mW |
| Derating Liner from 25°C per Dice | - | 0.3 | mA / °C |
| Continuous Forward Current per Dice | IAF | 30 | mA |
| Peak Current per Dice (duty cycle 1/10, 1kHz) | IPF | 60 | mA |
| Reverse Voltage per Dice | VR | 5 | V |
| Operating Temperature | TOPR | -40~+105 | °C |
| Storage Temperature | TSTG | -40~+105 | °C |

OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

| Characteristic | Symbol | Condition | Value | | | Unit |
|---------------------------------------|--------|-----------|-------|-------|------|------|
| | | | Min. | Type. | Max. | |
| Forward Voltage per Dice | VF | IF =20mA | - | 3.0 | 3.4 | V |
| Reverse Current per Dice | IR | VR = 5V | - | - | 10 | µA |
| Peak Wavelength per Dice | λP | IF =20mA | - | 470 | - | nm |
| Dominant Wavelength per Dice | λD | IF =20mA | 464 | - | 474 | nm |
| Luminous Intensity | IV | IF =20mA | 70 | 100 | - | mcd |
| Spectral Radiation Bandwidth per Dice | Δλ | IF =20mA | - | 20 | - | nm |

*Tolerance of viewing angle: -10 / +5 deg.



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OPTICAL CHARACTERISTIC CURVES

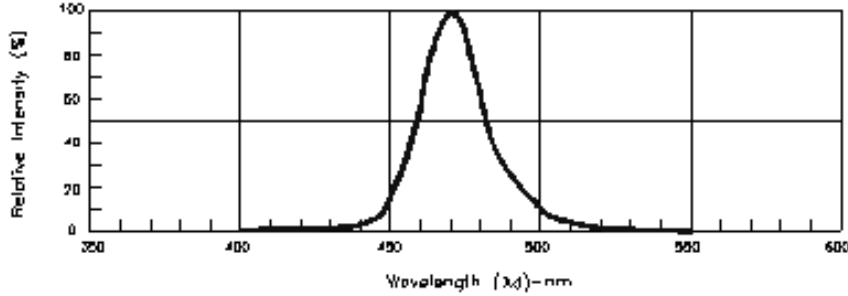


Fig 1-Relative Intensity vs. Wavelength

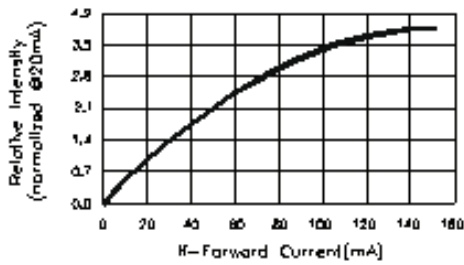


Fig.2-Relative Luminous Intensity vs. Forward Current

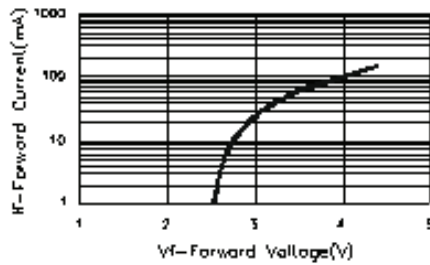


Fig.3-Forward Current vs. Forward Voltage

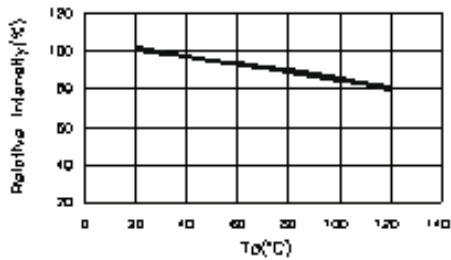


Fig.4-Relative Intensity(@20mA) vs. Ambient Temperature

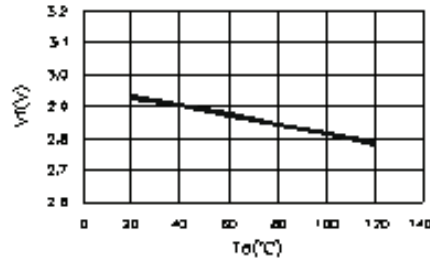


Fig.5-Forward Voltage(@20mA) vs. Ambient Temperature

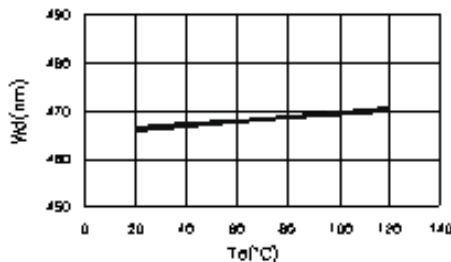


Fig.6-Dominant Wavelength(@20mA) vs. Ambient Temperature

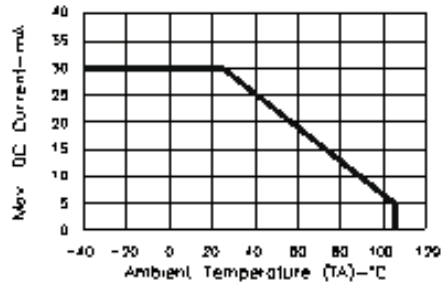


Fig.7-Max. Allowable DC Current vs. Ambient Temperature

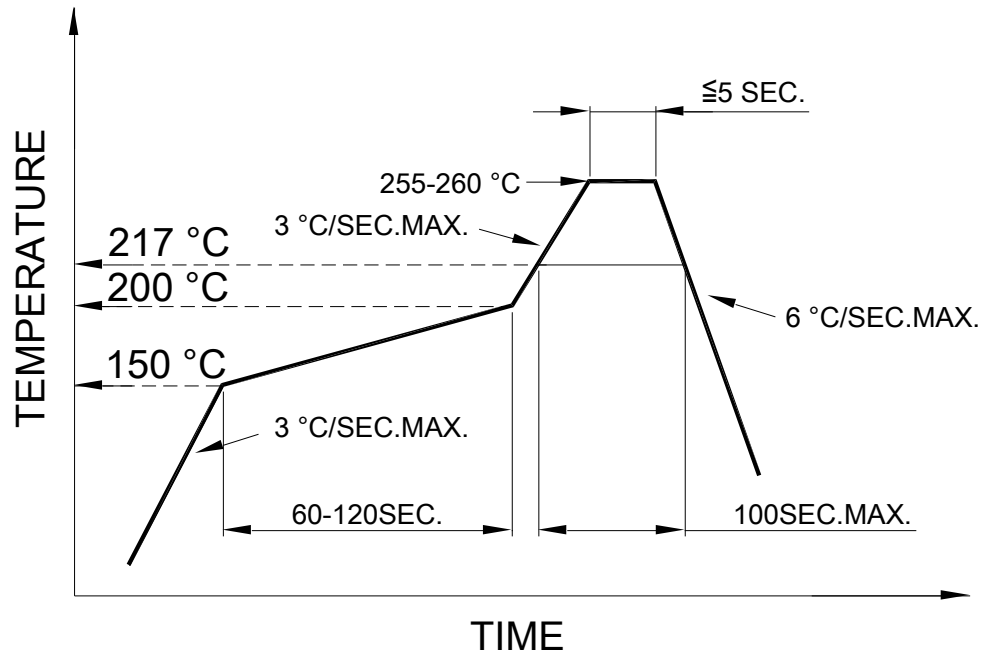


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SOLDERING CONDITIONS – SMD TYPE LED
● RECOMMEND SOLDERING PROFILE

SMT Soldering Profile

Pb free reflow soldering Profile


● SOLDERING IRON

Basic specification : ≤ 4 seconds 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

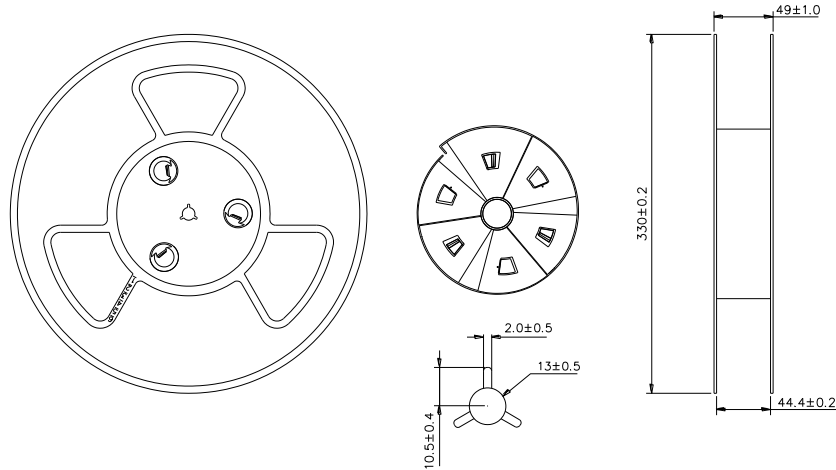
Customer must finish rework within ≤ 3 sec under 350°C.



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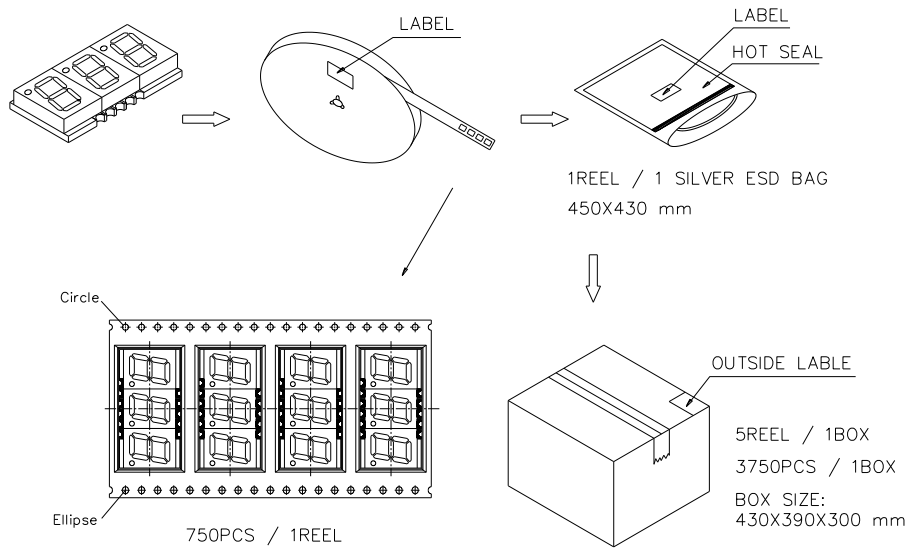
DIMENSIONS OF TAPE (Unit: mm)

● REEL DIMENSIONS



PACKAGING SPECIFICATION

● PACKING & LABEL SPECIFICATIONS



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