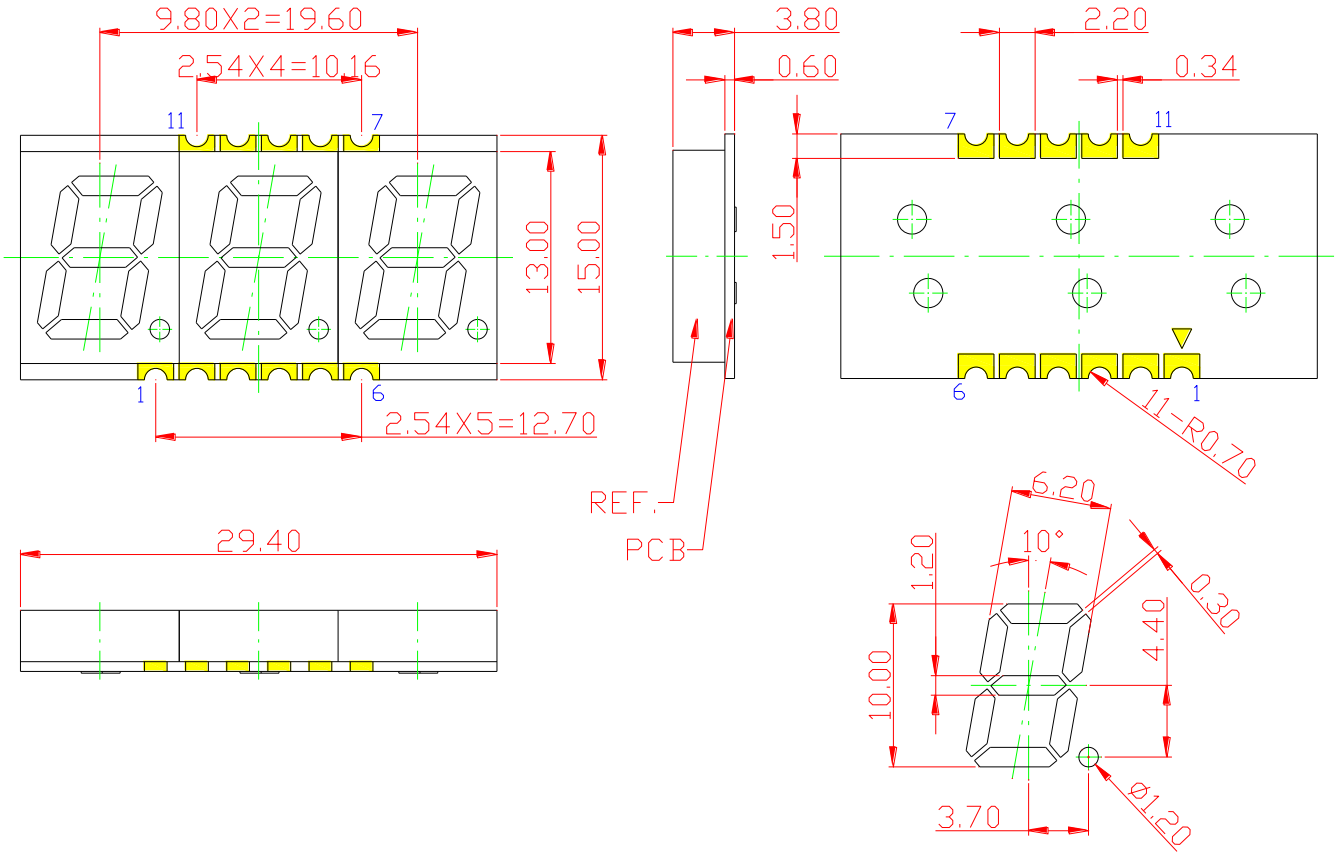


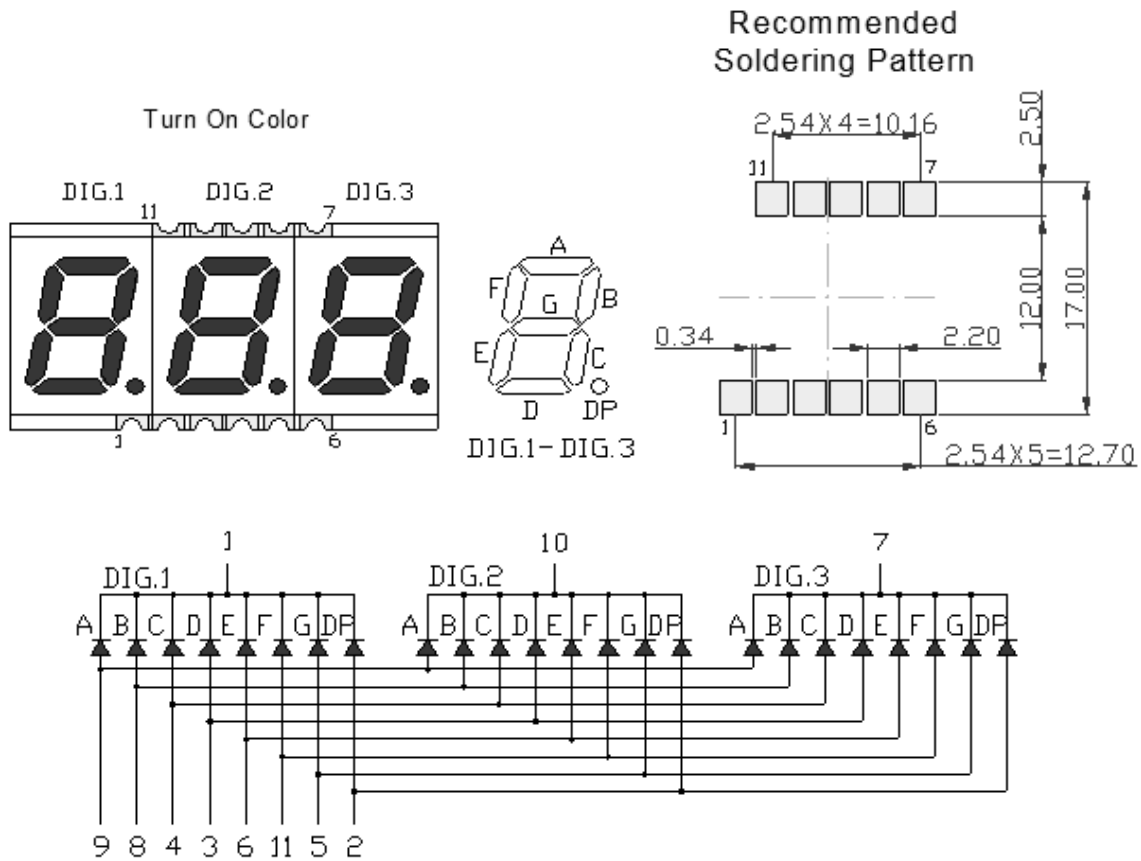
**SPECIFICATIONS** **SDTC39R2W**
**MECHANICAL DIMENSIONS**


- 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
SDTC39R2W	InGaAlP	Red	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.
3. Specifications are subject to change without notice.



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

Parameter	Symbol		Unit
Power Dissipation per Dice	PAD	48	mW
Derating Liner from 25°C per Dice	-	0.3	mA / °C
Continuous Forward Current per Dice	IAF	20	mA
Peak Current per Dice (duty cycle 1/10, 1kHz)	IPF	40	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	-	2.1	2.4	V
Reverse Current per Dice	IR	VR = 5V	-	-	10	µA
Peak Wavelength per Dice	λP	IF =20mA	-	632	-	nm
Dominant Wavelength per Dice	λD	IF =20mA	619	-	629	nm
Luminous Intensity	IV	IF =20mA	30	60	-	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

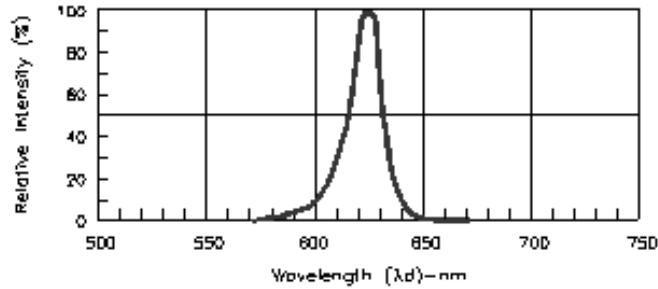


Fig.1-Relative Intensity vs Wavelength

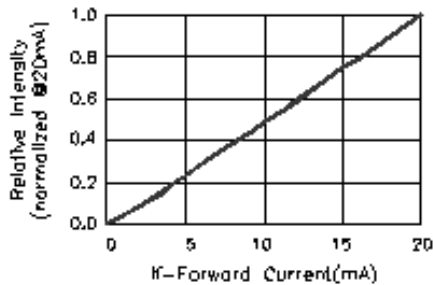


Fig.2-Relative Luminous Intensity vs. Forward Current

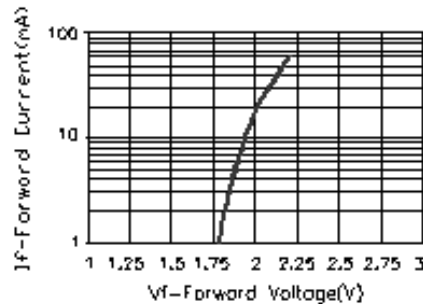


Fig.3-Forward Current vs. Forward Voltage

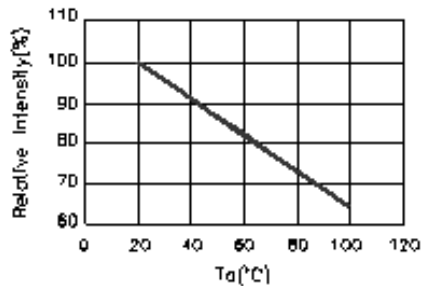


Fig.4-Relative Intensity(@20mA) vs. Ambient Temperature

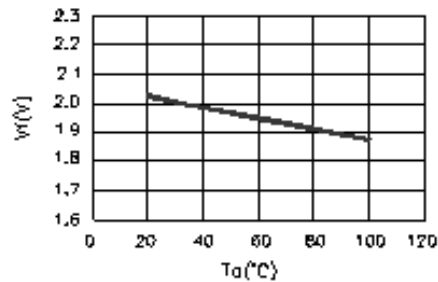


Fig.5-Forward Voltage(@20mA) vs. Ambient Temperature

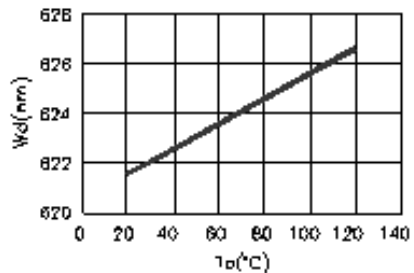


Fig.6-Dominant Wavelength(@20mA) vs. Ambient Temperature

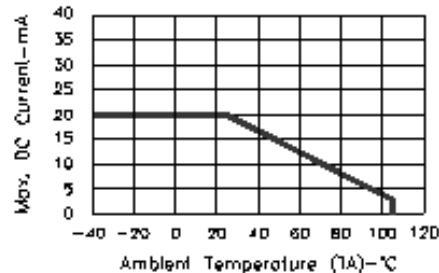


Fig.7-Max. Allowable DC Current vs Ambient Temperature

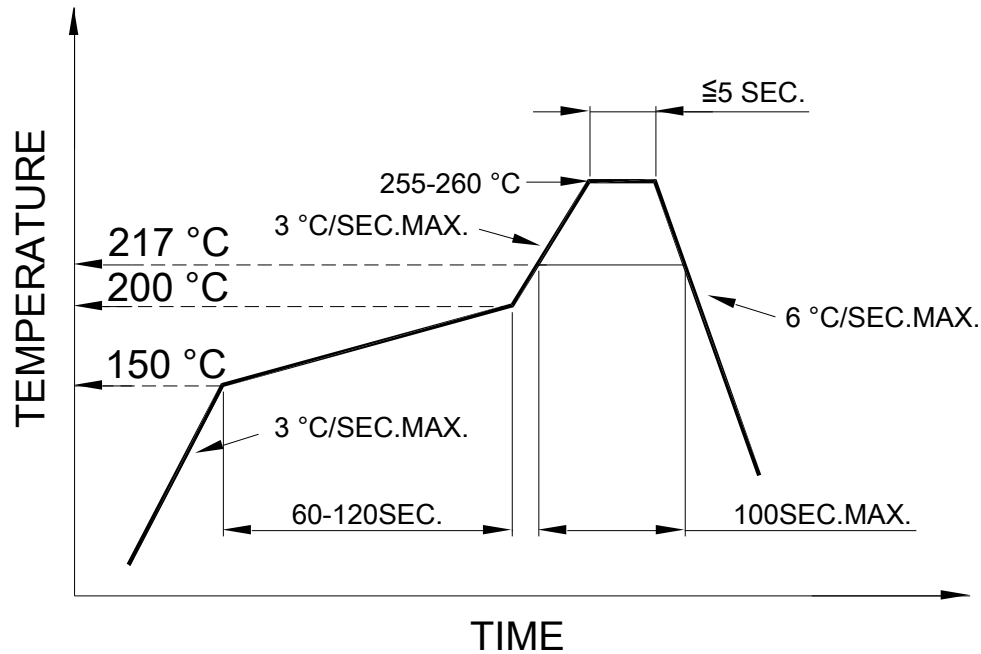


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**SOLDERING CONDITIONS – SMD TYPE LED**
**● RECOMMEND SOLDERING PROFILE**

SMT Soldering Profile

Pb free reflow soldering Profile


**● SOLDERING IRON**

Basic specification :  $\leq 4$  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**

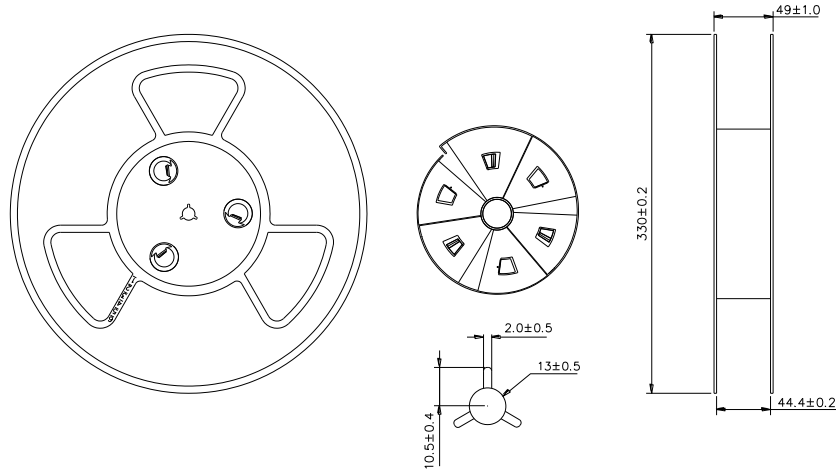
Customer must finish rework within  $\leq 3$  sec under 350°C.



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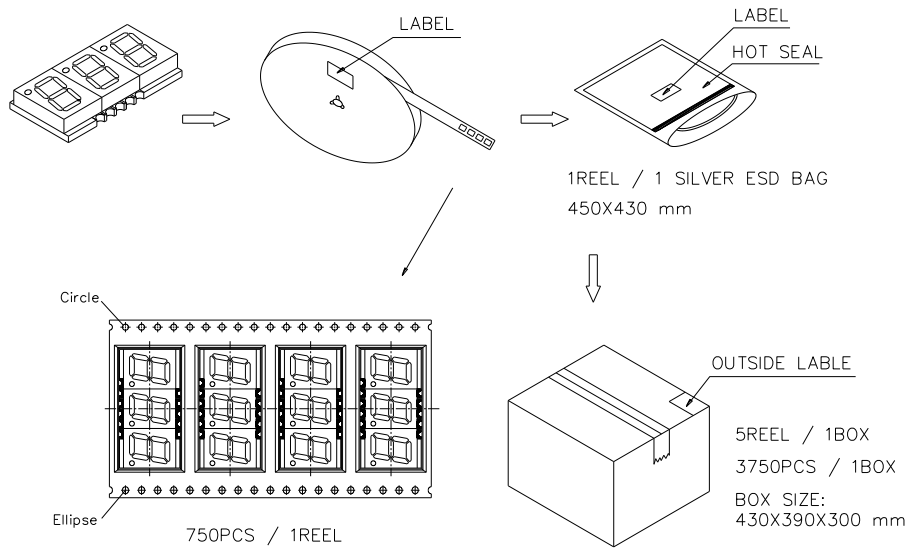
## DIMENSIONS OF TAPE (Unit: mm)

### ● REEL DIMENSIONS



## PACKAGING SPECIFICATION

### ● PACKING & LABEL SPECIFICATIONS



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