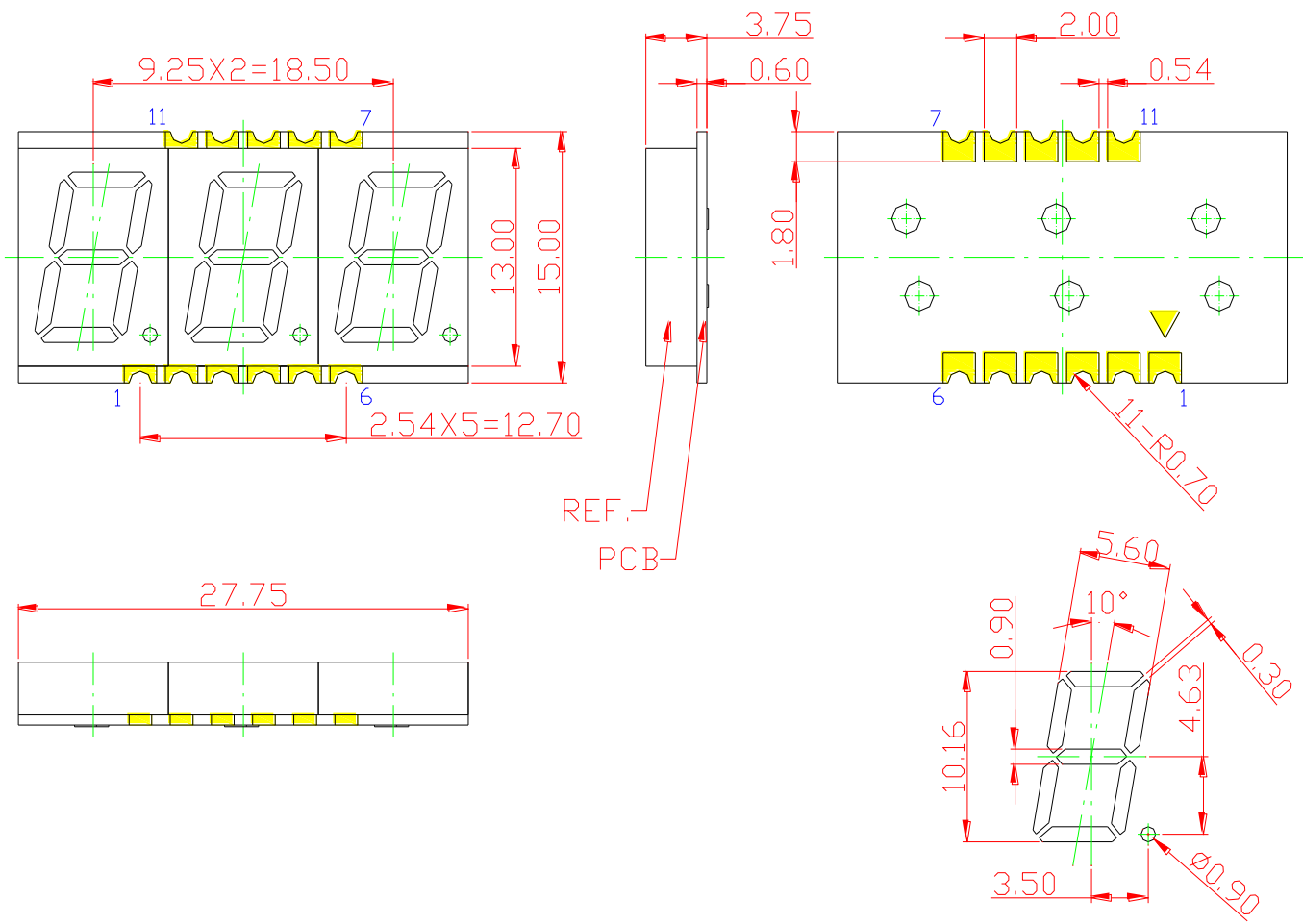


SPECIFICATIONS **SDTA40R2W**

MECHANICAL DIMENSIONS

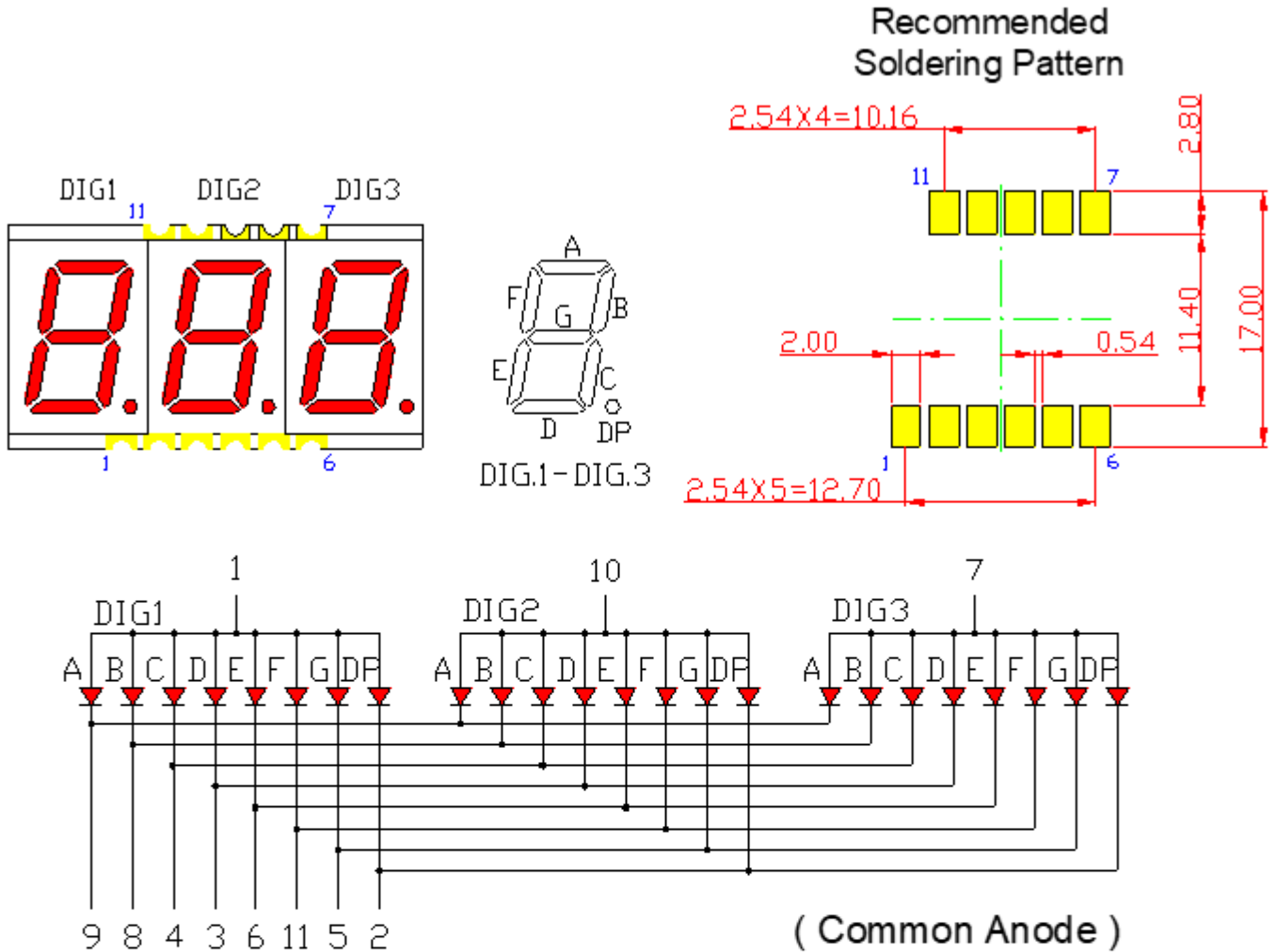


- Notes:
1. All dimensions are in millimeters (inches).
 2. Tolerance is $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
 3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Description
SDTA40R2W	InGaAlP	Red	White Segment	Common Anode



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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	-	0.28	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	°C
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	-	625	-	nm
Luminous Intensity	IV	IF =20mA	-	35	-	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

Typical Electro-optical Characteristic Curves (25 °C Free Air Temperature Unless Otherwise Specified)

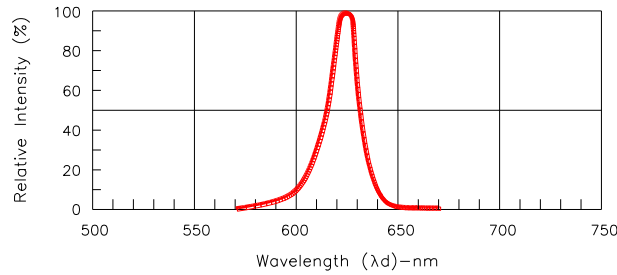


Fig.1-Relative Intensity VS. Wavelength

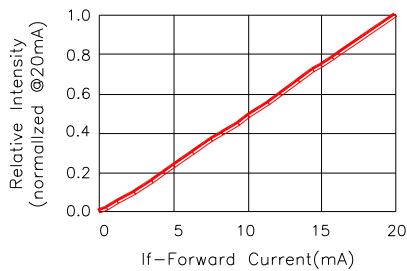


Fig.2-Relative Luminous Intensity vs. Forward Current

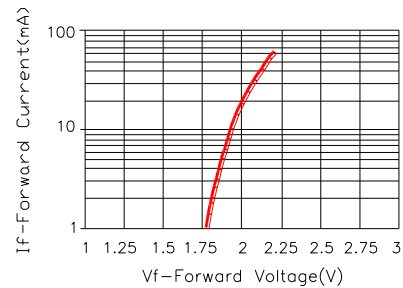


Fig.3-Forward Current vs. Forward Voltage

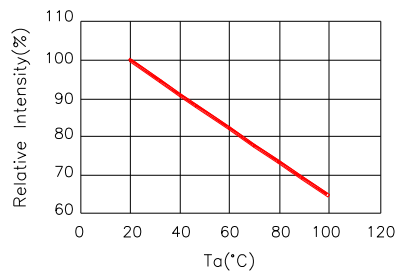


Fig.4-Relative Intensity(@20mA) vs. Ambient Temperature

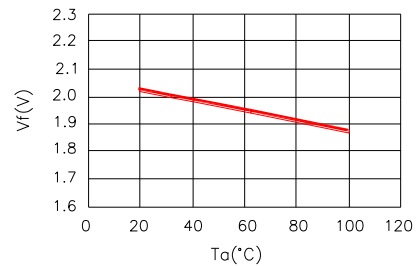


Fig.5-Forward Voltage(@20mA) vs. Ambient Temperature

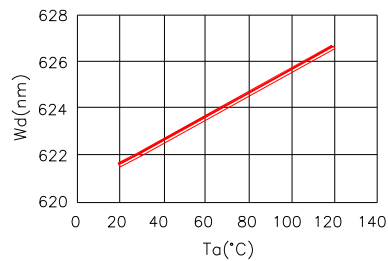


Fig.6-Dominant Wavelength(@20mA) VS. Ambient Temperature

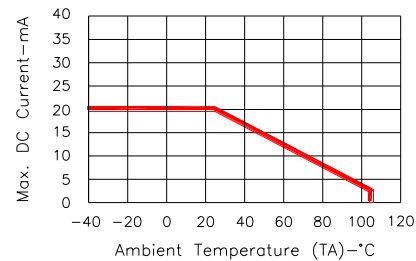


Fig.7-Max. Allowable DC Current VS. Ambient Temperature

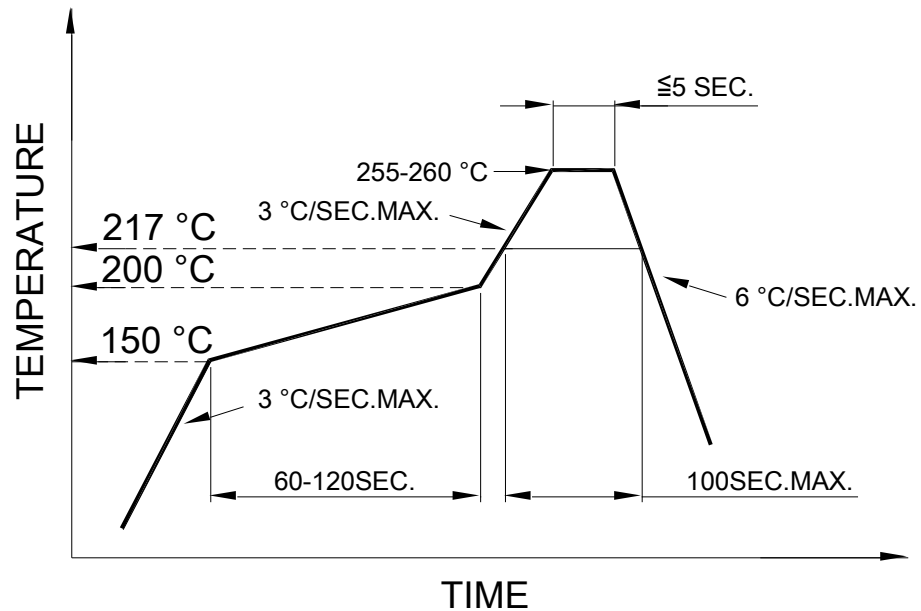


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SOLDERING CONDITIONS – SMD TYPE LED
● SMT REFLOW SOLDERING INSTRUCTIONS

SMT Soldering Profile

Pb free reflow 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

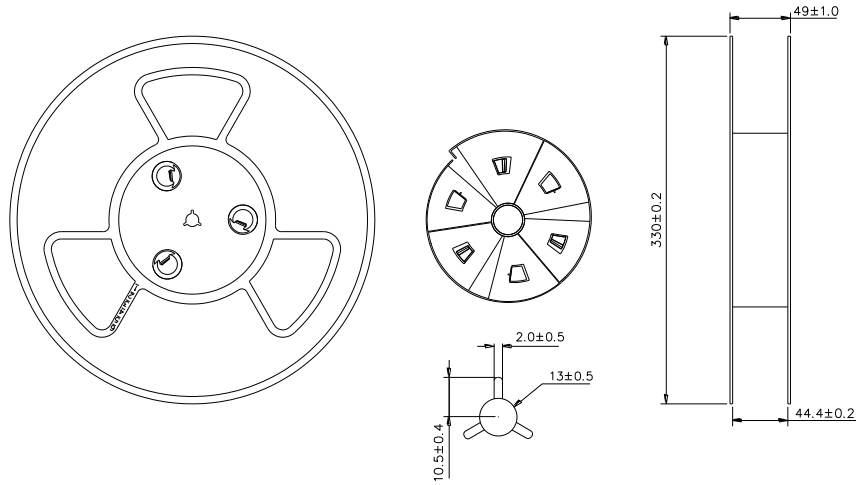
- Customer must finish rework within 5 sec. under 260°C.
- The head of soldering iron cannot touch copper foil.



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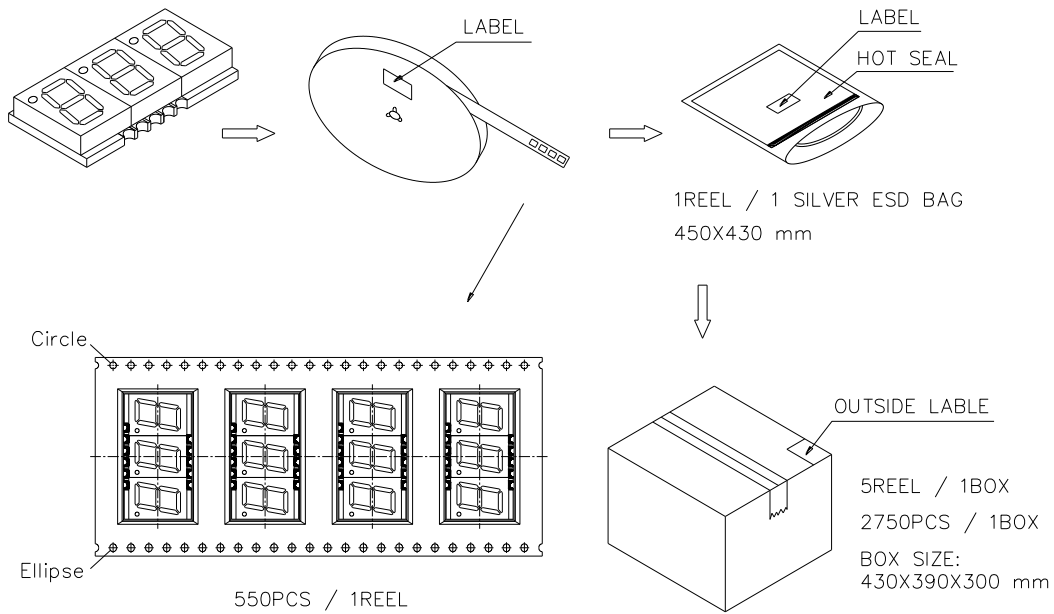
DIMENSIONS OF TAPE (Unit: mm)

● REEL DIMENSIONS



PACKAGING SPECIFICATION

● PACKING & LABEL SPECIFICATIONS



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