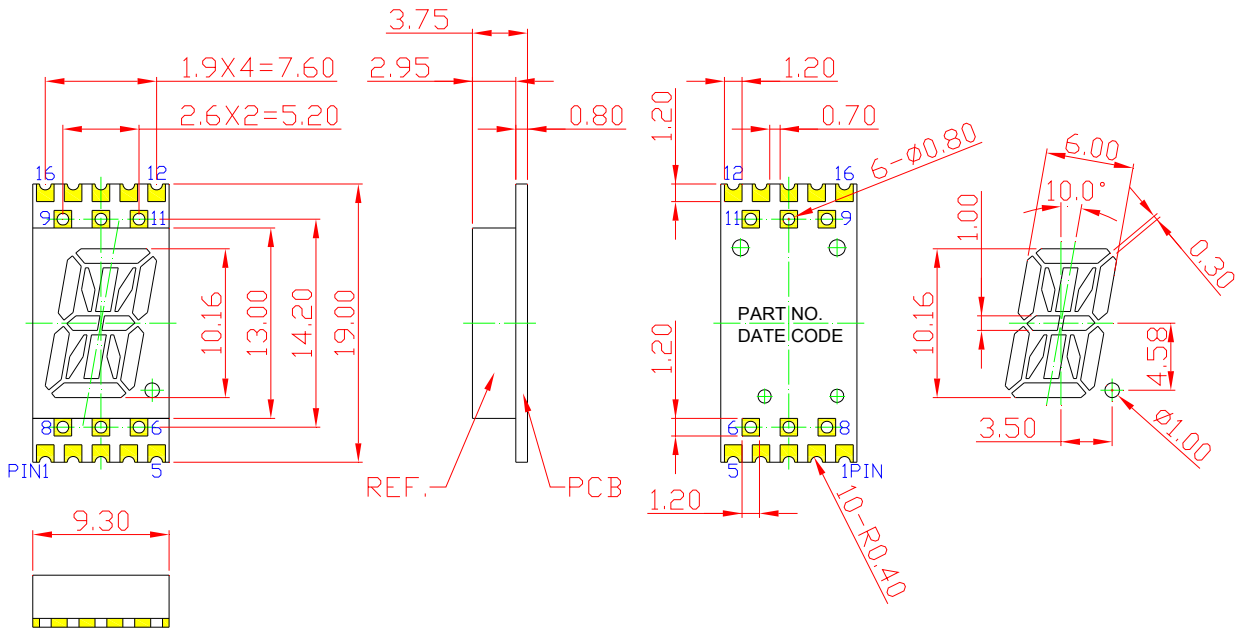


**SPECIFICATIONS** **SDSAN40B2W**

**MECHANICAL DIMENSIONS**

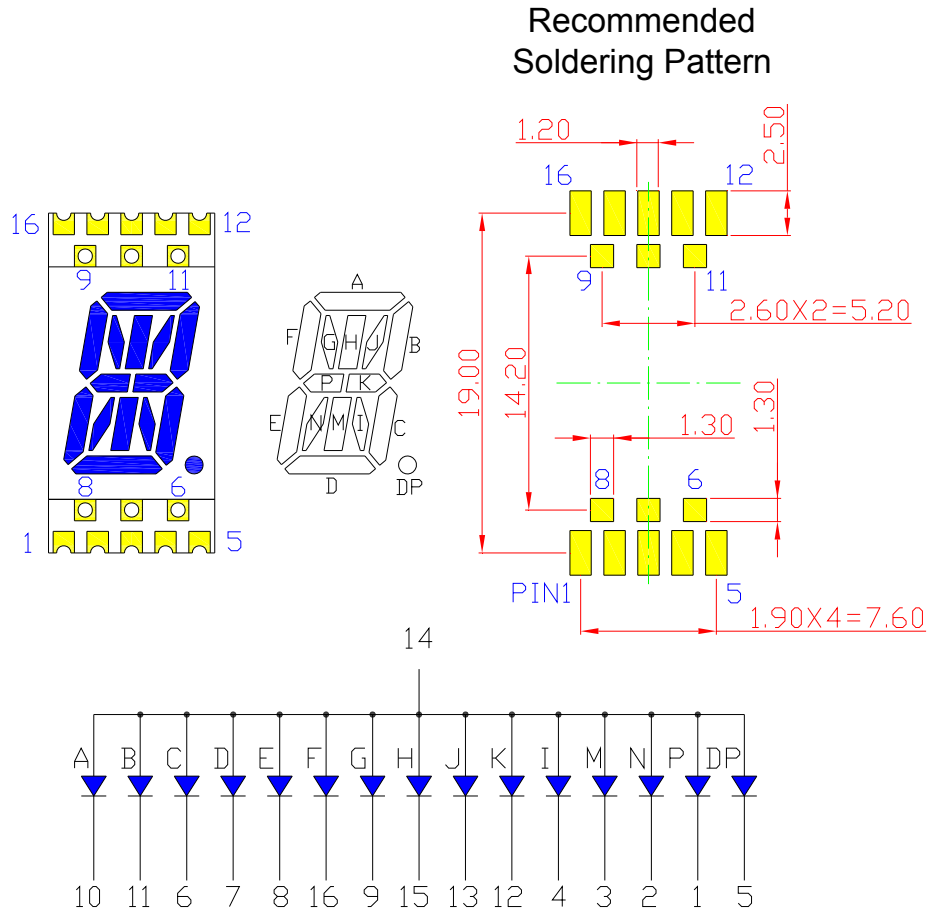


- Notes:
1. All dimensions are in millimeters (inches).
  2. Tolerance is ± 0.25mm (0.01") unless otherwise noted.
  3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Description
SDSAN40B2W	InGaN	Blue	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	120	mW
Derating Liner from 25°C per Dice	-	0.33	mA / °C
Continuous Forward Current per Dice	IAF	30	mA
Peak Current per Dice (duty cycle 1/10, 1kHz)	IPF	43	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		3.1	4.0	V
Reverse Current per Dice	IR	VR = 8V		-	10	µA
Dominant Wavelength per Dice	λD	IF =20mA	464	-	474	nm
Luminous Intensity per Dice	IV	IF =20mA	-	30	-	mcd
Spectral Radiation Bandwidth per Dice	Δλ	IF =20mA	-	30	-	nm

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



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## OPTICAL CHARACTERISTIC CURVES

(25 °C Free Air Temperature Unless Otherwise Specified)

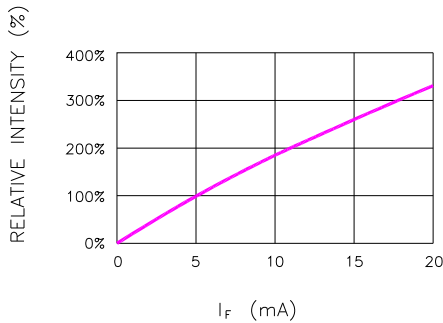


Fig.1 RELATIVE INTENSITY VS. FORWARD CURRENT

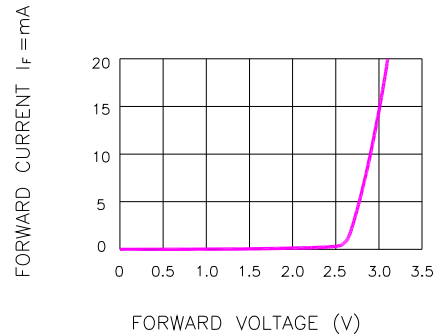


Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE

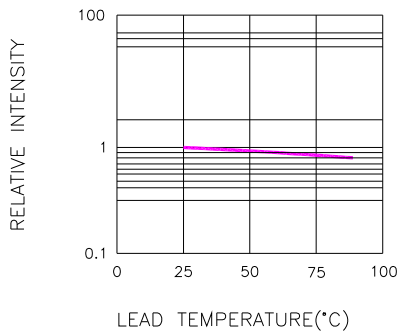


Fig.3 RELATIVE INTENSITY VS. LEAD TEMPERATURE  
(PULSED 20 mA; 300us PULSE, 10ms PERIOD)

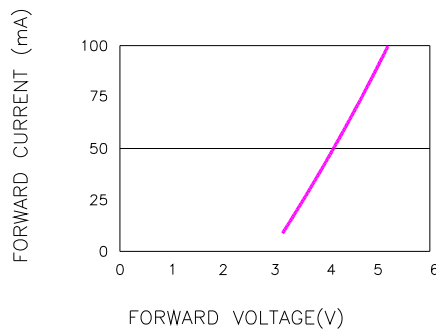


Fig.4 PEAK FORWARD VOLTAGE VS. FORWARD (100us TEST PULSE, 1% DUTY CYCLE)

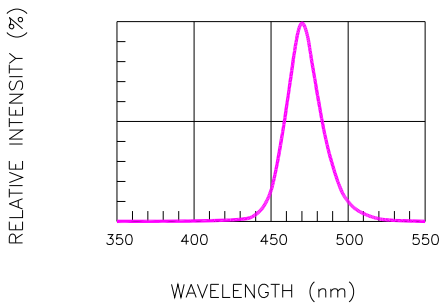


Fig.5 RELATIVE INTENSITY VS. WAVELENGTH

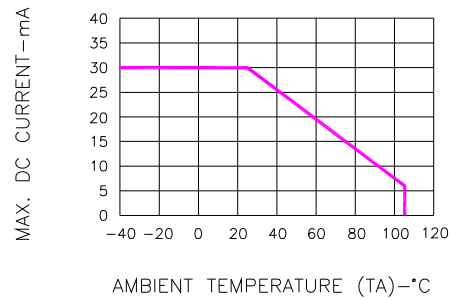


Fig.6 MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE

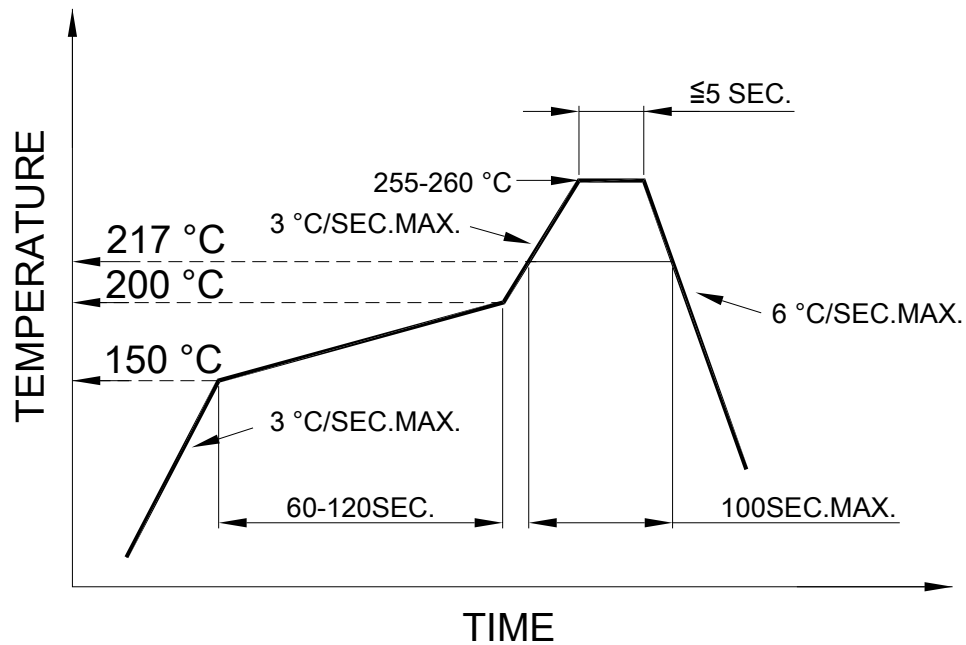


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**SOLDERING CONDITIONS – SMD TYPE LED**
**● SMT REFLOW SOLDERING INSTRUCTIONS**

SMT Soldering Profile

Pb free reflow soldering Profile


**● SOLDERING IRON**

Basic spec is  $\leq 4$  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.

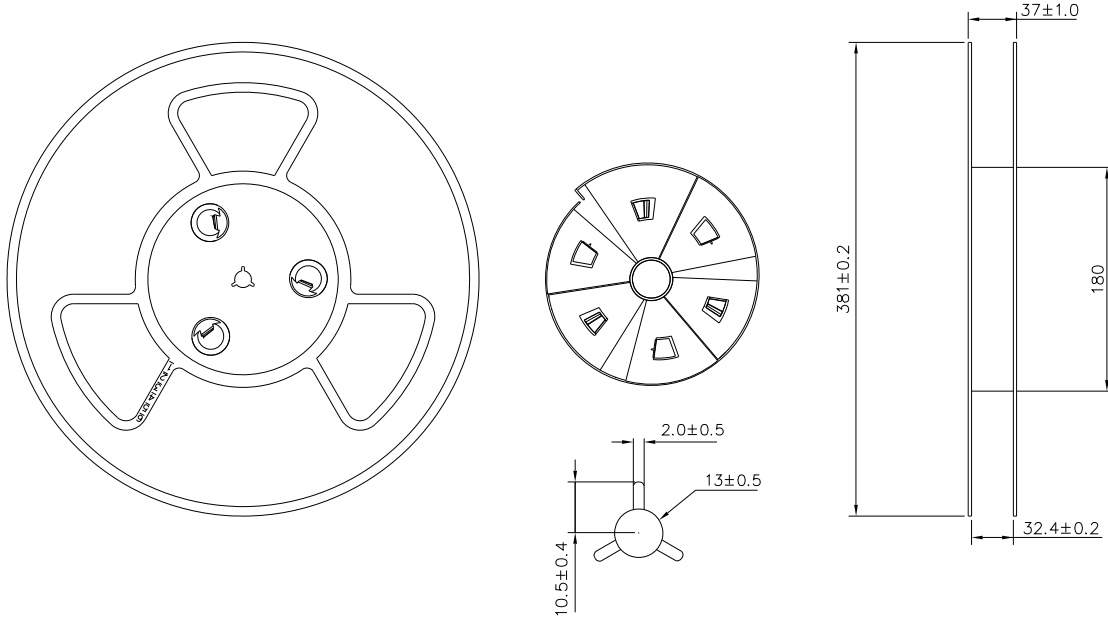
**● REWORK**

- Customer must finish rework within 4 sec. under 245°C.
- The head of soldering iron cannot touch copper foil.

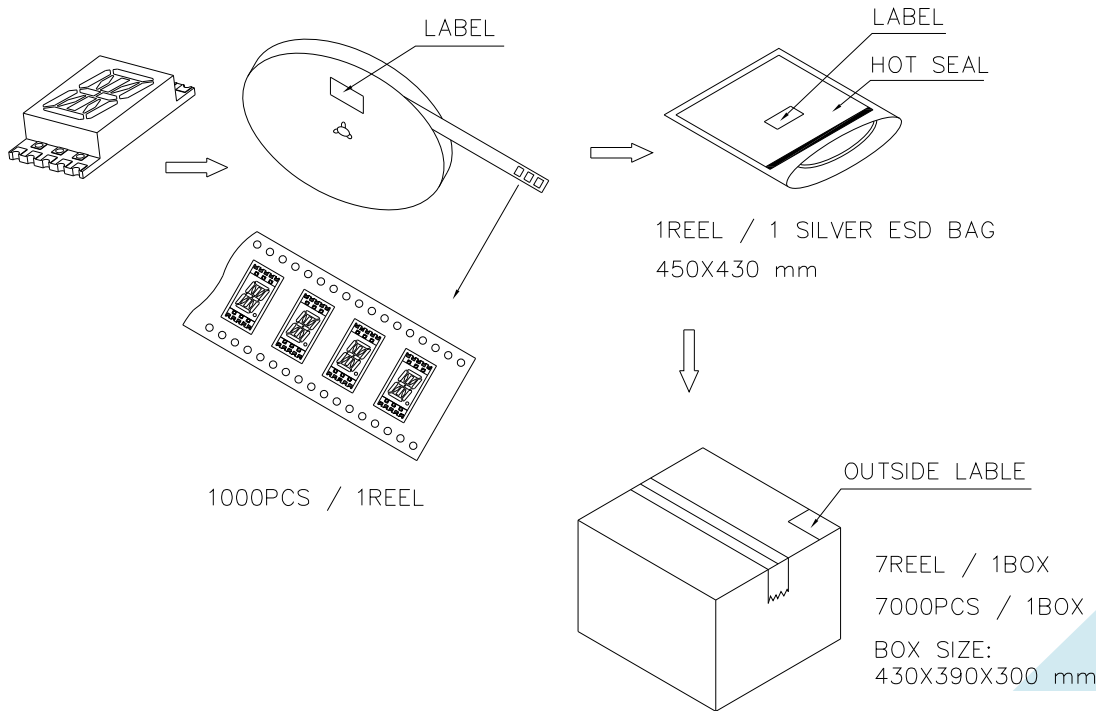


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## DIMENSIONS OF TAPE (Unit: mm)



## PACKAGING SPECIFICATION



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