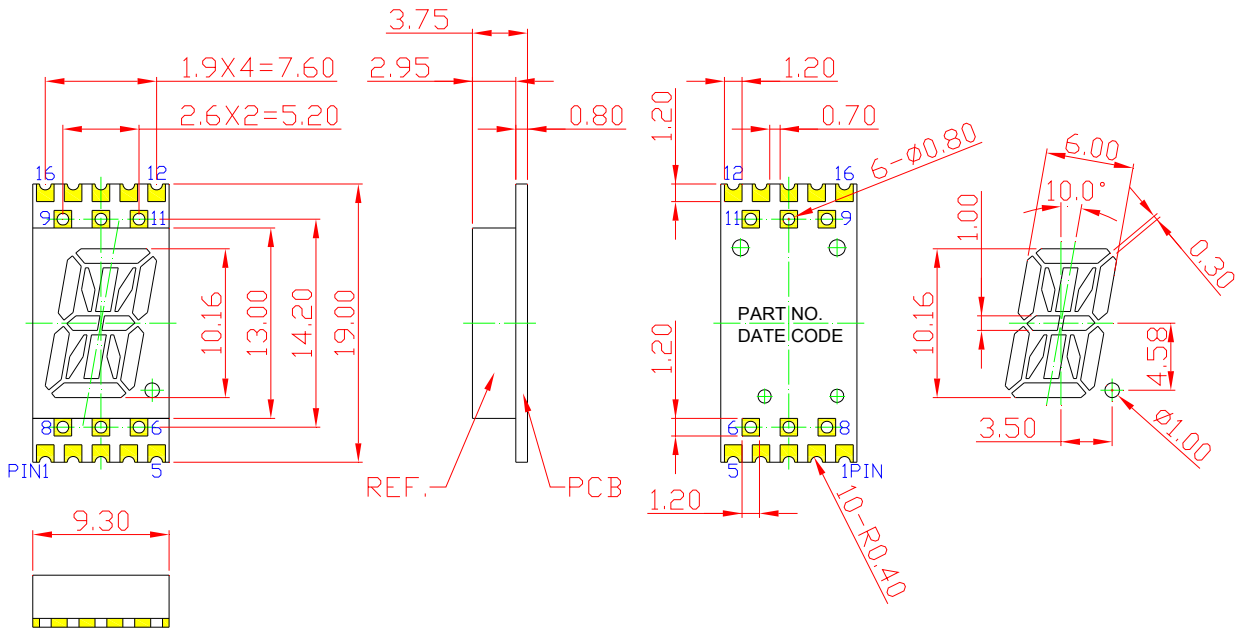


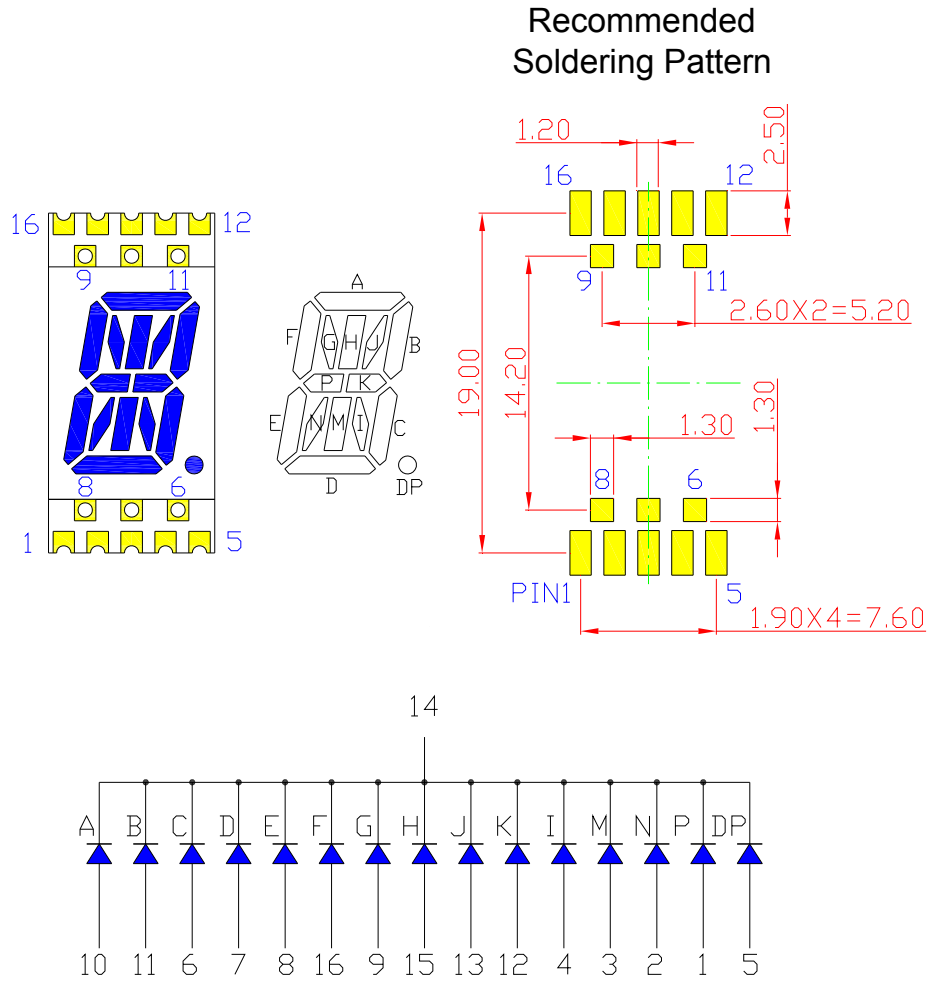
SPECIFICATIONS **SDSCN40B2W**
MECHANICAL DIMENSIONS


- 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
SDSCN40B2W	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.
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)

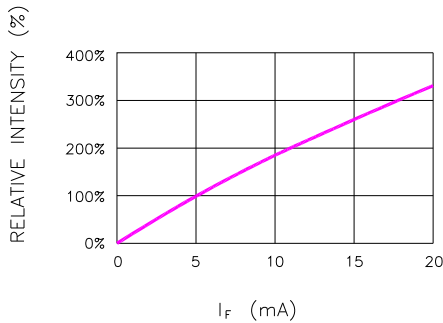


Fig.1 RELATIVE INTENSITY VS. FORWARD CURRENT

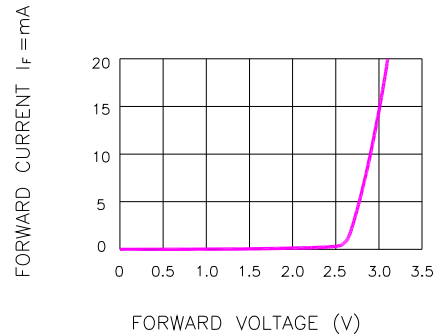


Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE

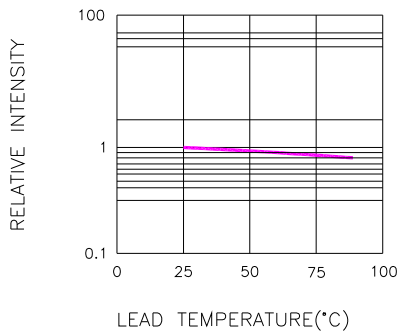


Fig.3 RELATIVE INTENSITY VS. LEAD TEMPERATURE
(PULSED 20 mA; 300us PULSE, 10ms PERIOD)

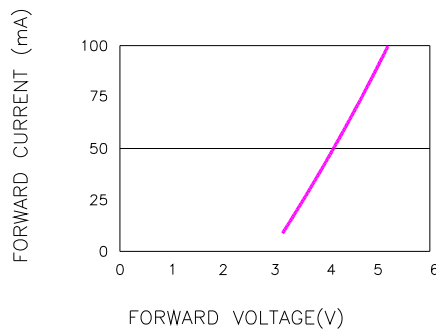


Fig.4 PEAK FORWARD VOLTAGE VS. FORWARD (100us TEST PULSE, 1% DUTY CYCLE)

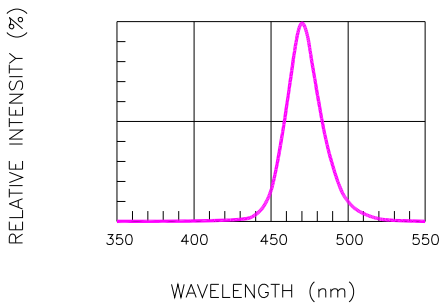


Fig.5 RELATIVE INTENSITY VS. WAVELENGTH

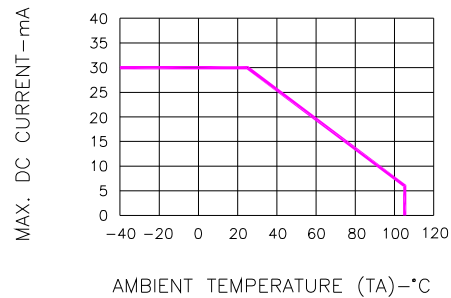


Fig.6 MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE

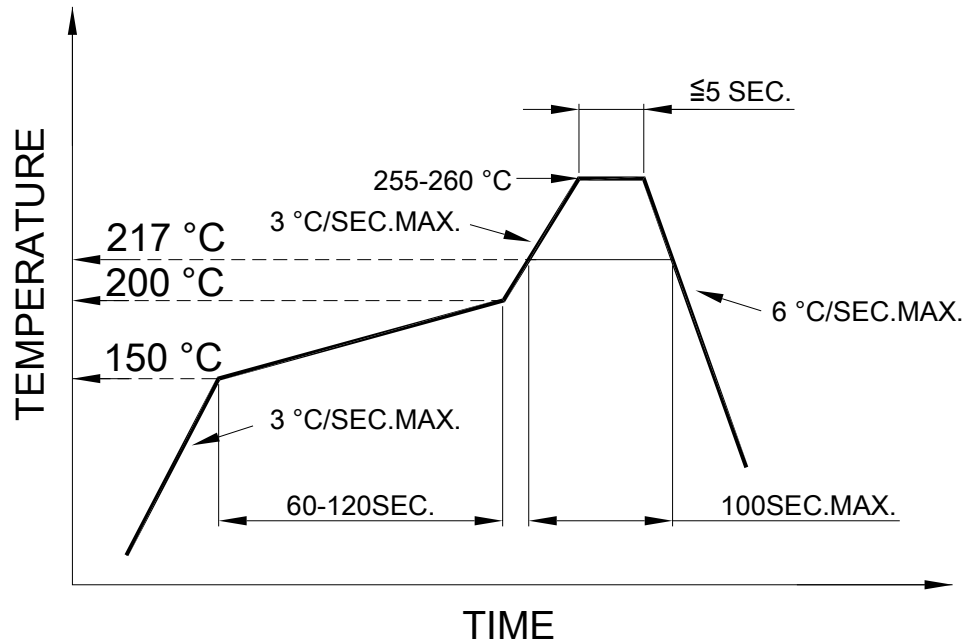


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SOLDERING CONDITIONS – SMD TYPE LED
● SMT REFLOW SOLDERING INSTRUCTIONS

SMT Soldering Profile

Pb free reflow soldering Profile


● SOLDERING IRON

Basic spec is ≤ 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.

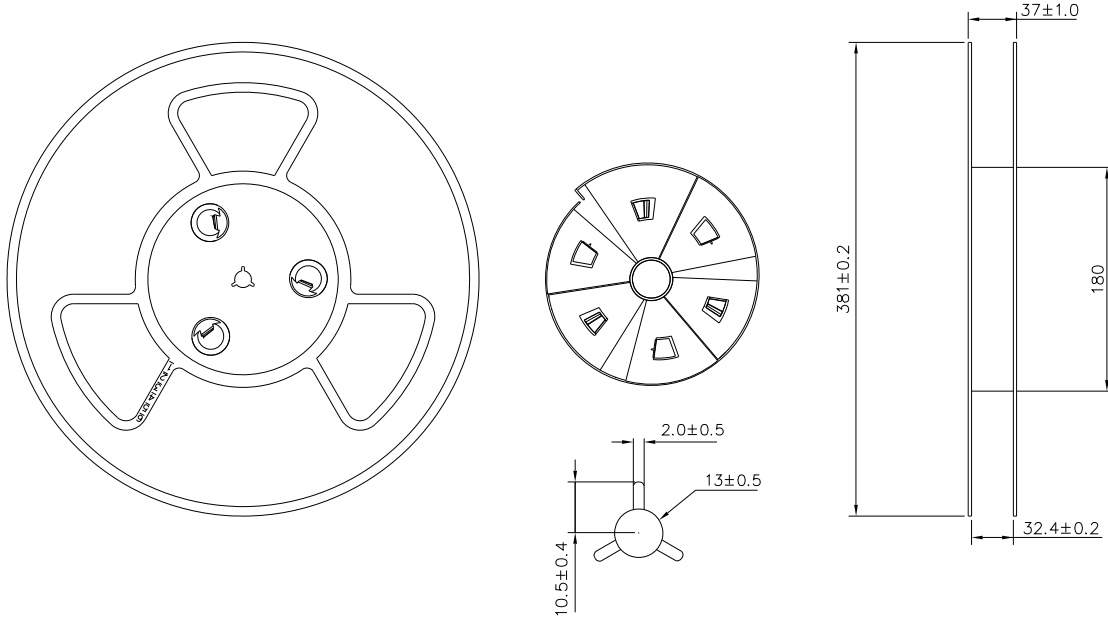
● REWORK

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

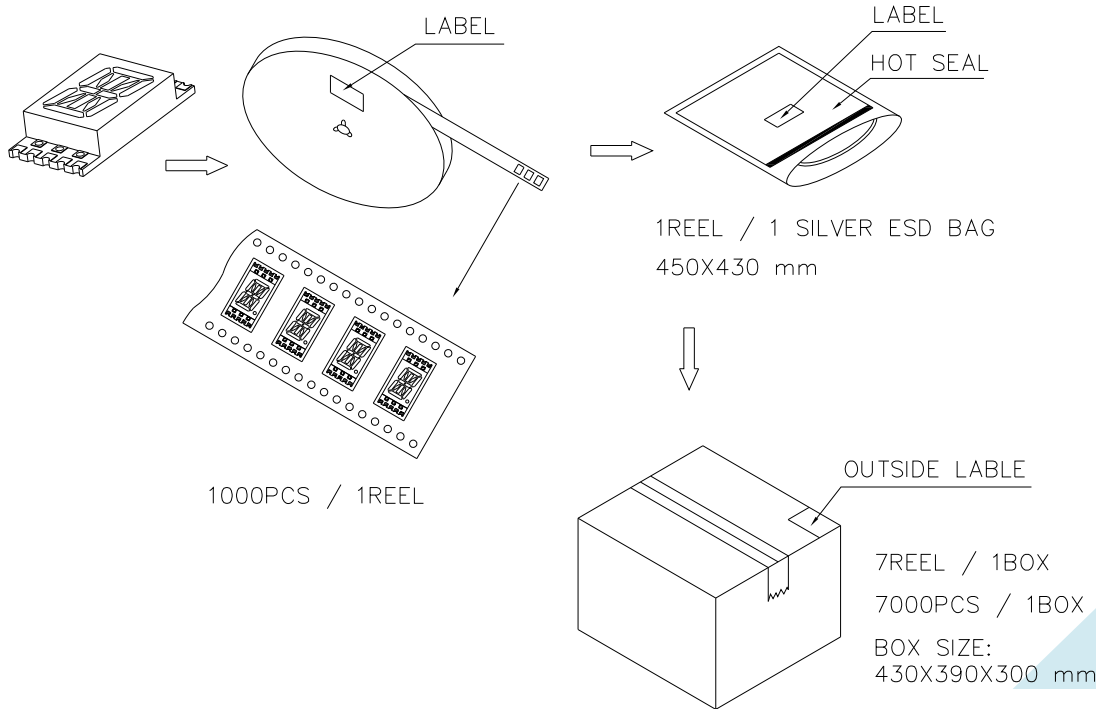


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DIMENSIONS OF TAPE (Unit: mm)



PACKAGING SPECIFICATION



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