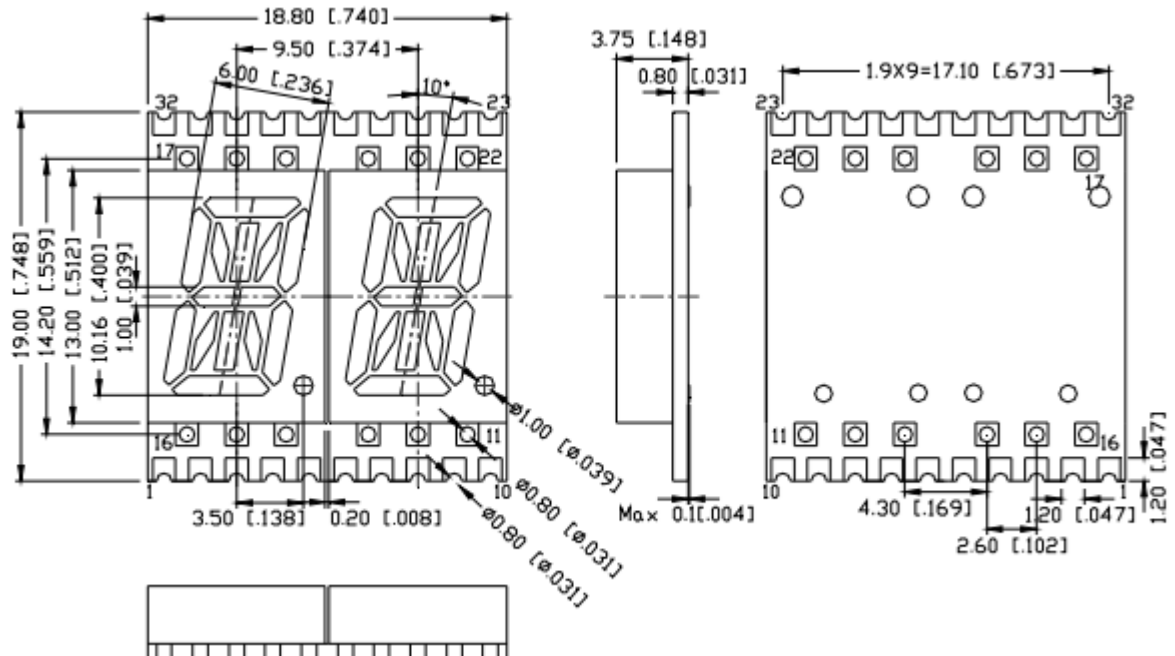


SPECIFICATIONS **SDDAN40B2W**

OUTLINES DIMENSIONS



The technical drawing shows three views of the SDDAN40B2W LED:

- Top View:** Shows a rectangular package with a total width of 18.80 mm [0.740]. The distance between the centers of the two main LED segments is 9.50 mm [0.374]. The top edge has a 6.00 mm [0.236] wide segment with a 10° angle. The bottom edge has a 3.50 mm [0.138] wide segment with a 0.20 mm [0.008] gap between segments. The overall height is 19.00 mm [0.748].
- Side View:** Shows a height of 3.75 mm [0.148]. The top edge has a 0.80 mm [0.031] wide segment. The bottom edge has a maximum thickness of 0.1 mm [0.004].
- Bottom View:** Shows a 1.9x9=17.10 mm [0.673] wide segment. The distance between the centers of the two main LED segments is 4.30 mm [0.169]. The bottom edge has a 1.20 mm [0.047] wide segment. The overall height is 1.20 mm [0.047].

Notes:

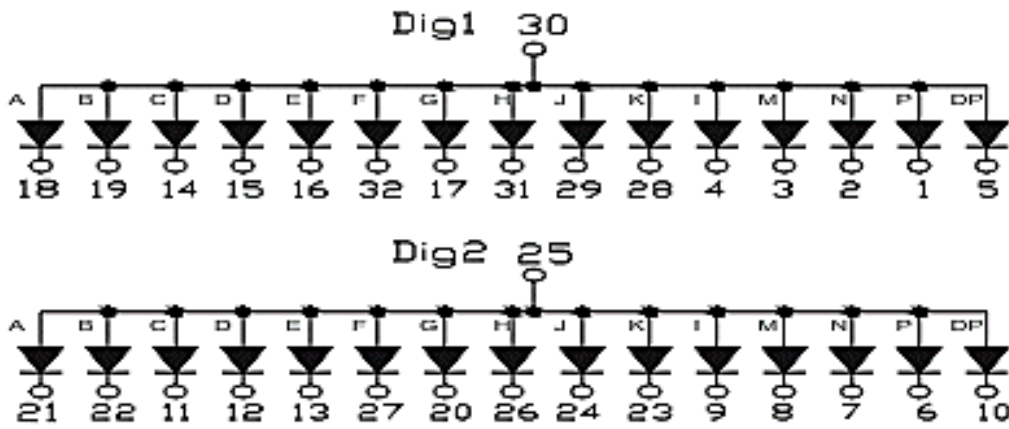
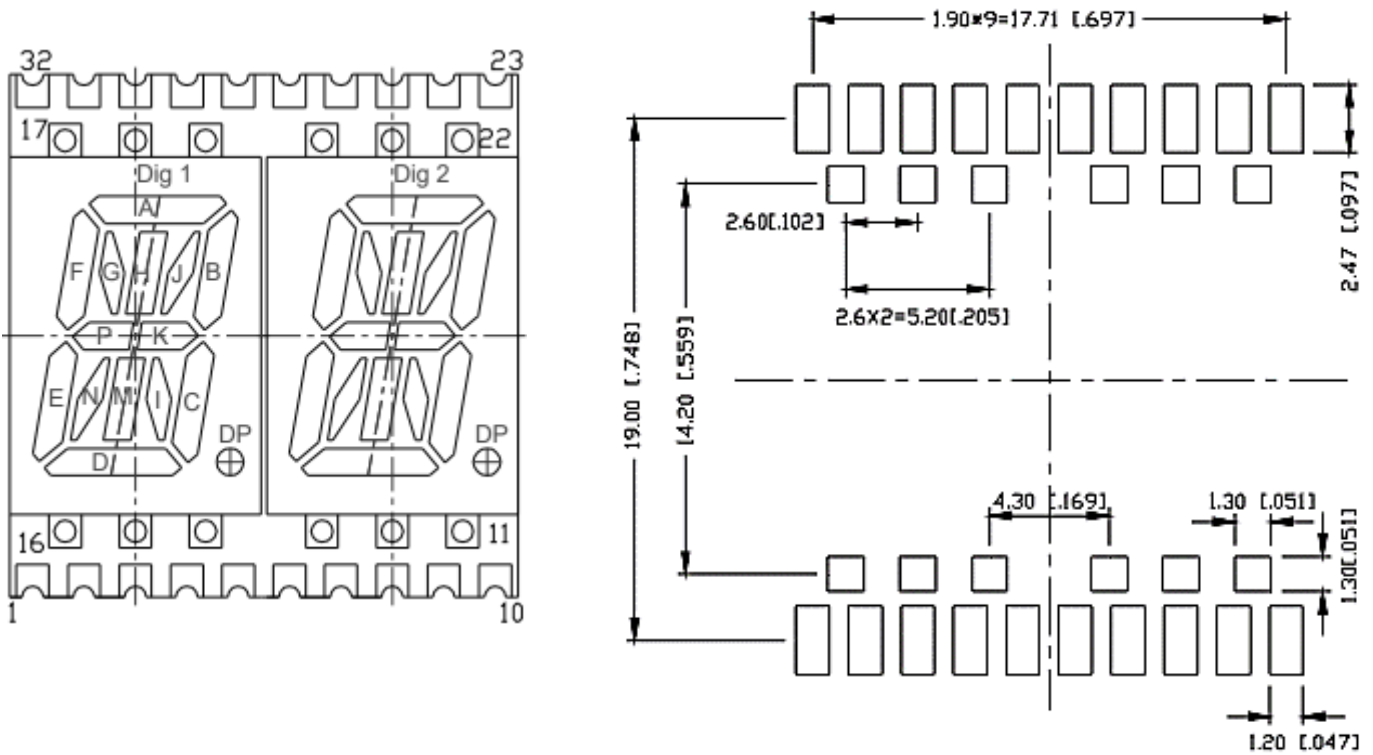
1. All Dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Description
SDDAN40B2W	InGaN	Blue	White Segment	Common Anode



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TYPICAL INTERNAL EQUIVALENT CIRCUIT



Common Anode



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

Parameter	Symbol	Max Rating	Unit
Power Dissipation	PD	114	mW
Pulse Forward Current	IFP	100	mA
Continuous Forward Current	IF	30	mA
Reverse Voltage Segment	VR	5	V
Operating Temperature Range	TOPR	-40~+105	°C
Storage Temperature Range	TSTG	-40~+105	°C
IFP = Pulse Width ≤ 10 ms, Duty Ratio ≤1/10. Soldering Condition: 260 °C/ 5sec			

OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	IV	IF = 20mA	-	20	-	mcd
Forward Voltage (Per Dice)	VF	IF = 20mA	-	3.2	3.8	V
Reverse Leakage Current	IR	VR = 5V	-	-	10	µA
Dominant Wavelength	λd	IF = 20mA	-	470	-	nm
Peak Wavelength	Δp	IF = 20mA	-	-	-	nm



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OPTICAL CHARACTERISTIC CURVES

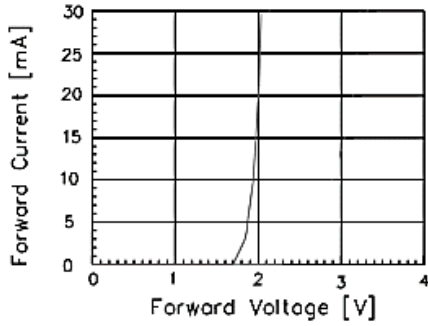


Fig 1. Forward Current vs. Forward Voltage

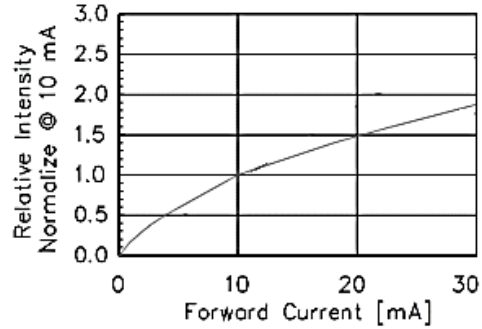


Fig 2. Relative Intensity vs. Forward Current

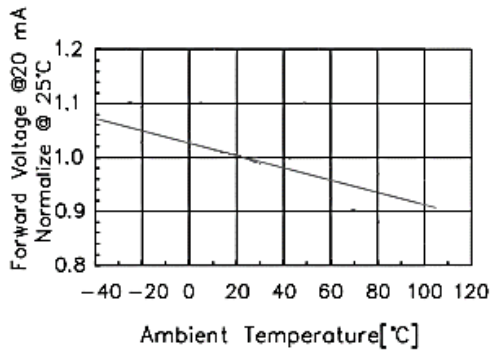


Fig 3. Forward Voltage vs. Temperature

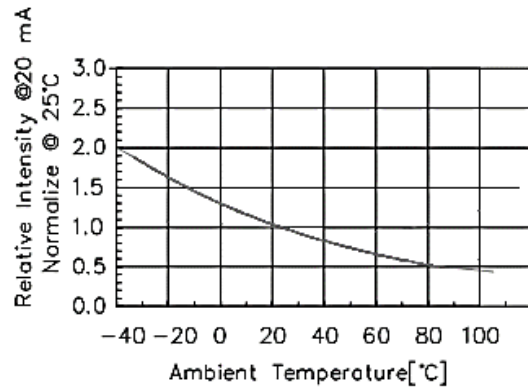


Fig 4. Relative Intensity vs. Temperature

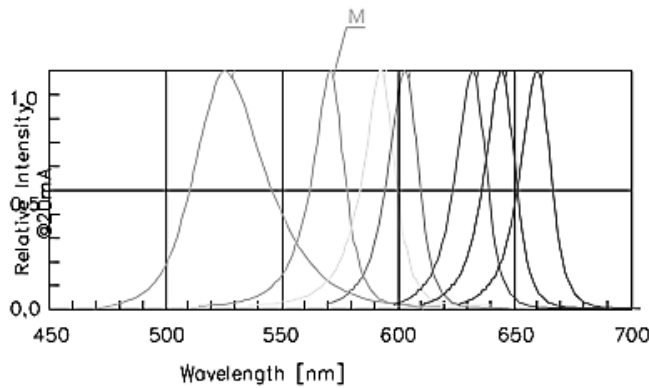


Fig 5. Relative Intensity vs. Wavelength

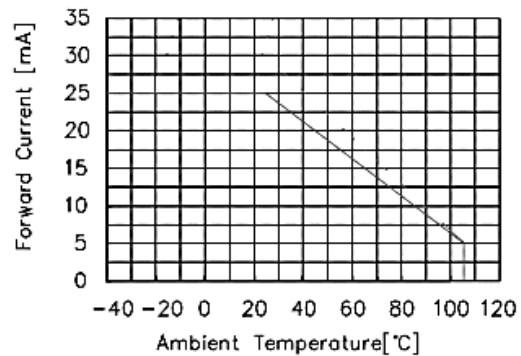


Fig 6. Forward current vs. Temperature

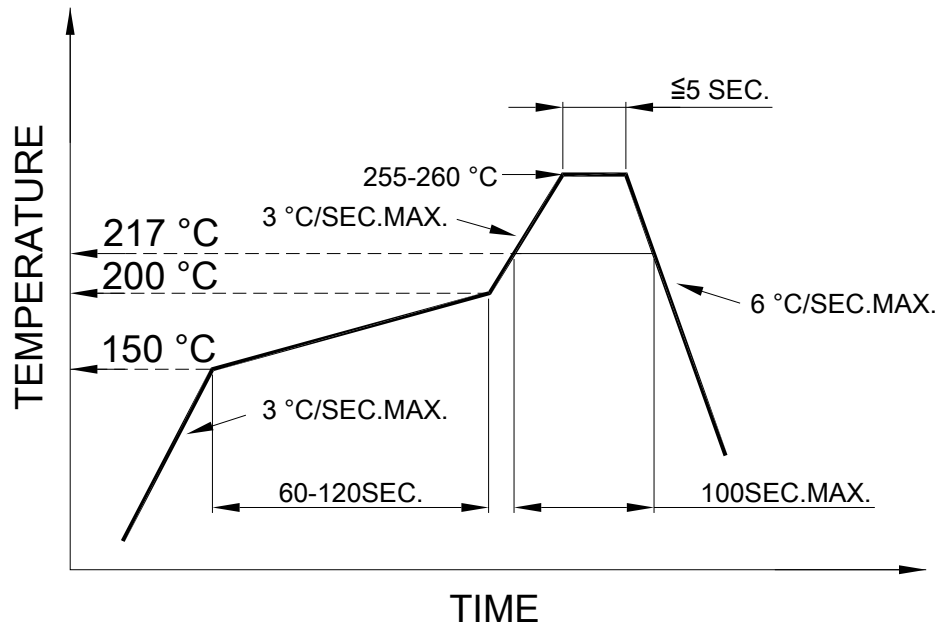


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SOLDERING CONDITIONS – DISPLAY TYPE LED
● SMT REFLOW SOLDERING INSTRUCTIONS

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

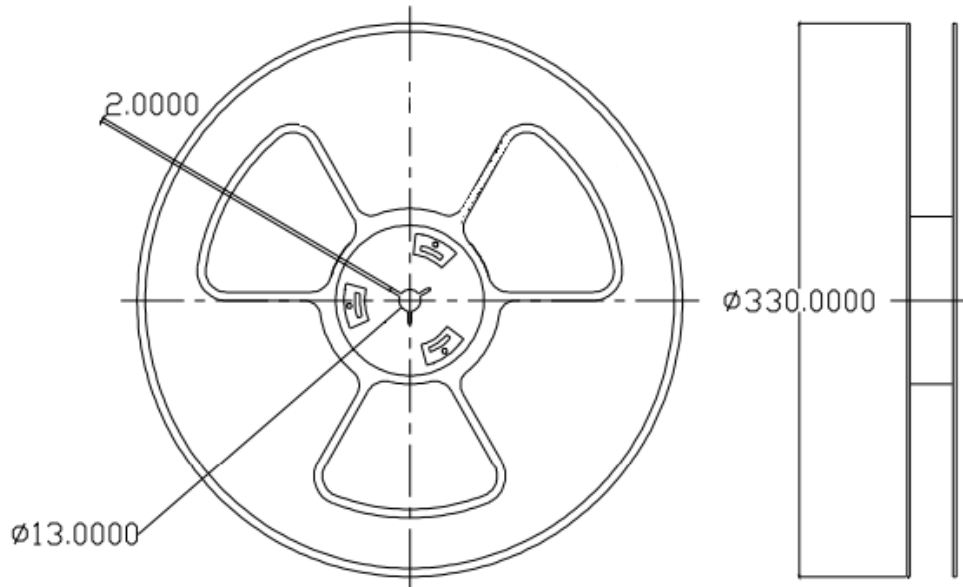
- Customer must finish rework within 3 sec. under 350°C.
- The head of soldering iron cannot touch copper foil.



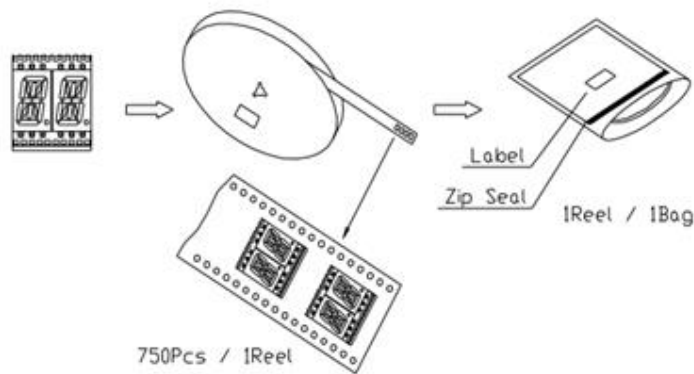
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PACKAGING SPECIFICATION

REEL DIMENSION



PACKING & LABEL DIMENSIONS



Note:

1. Specifications are subject to change without notice.
2. Please contact us for the updated information.



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