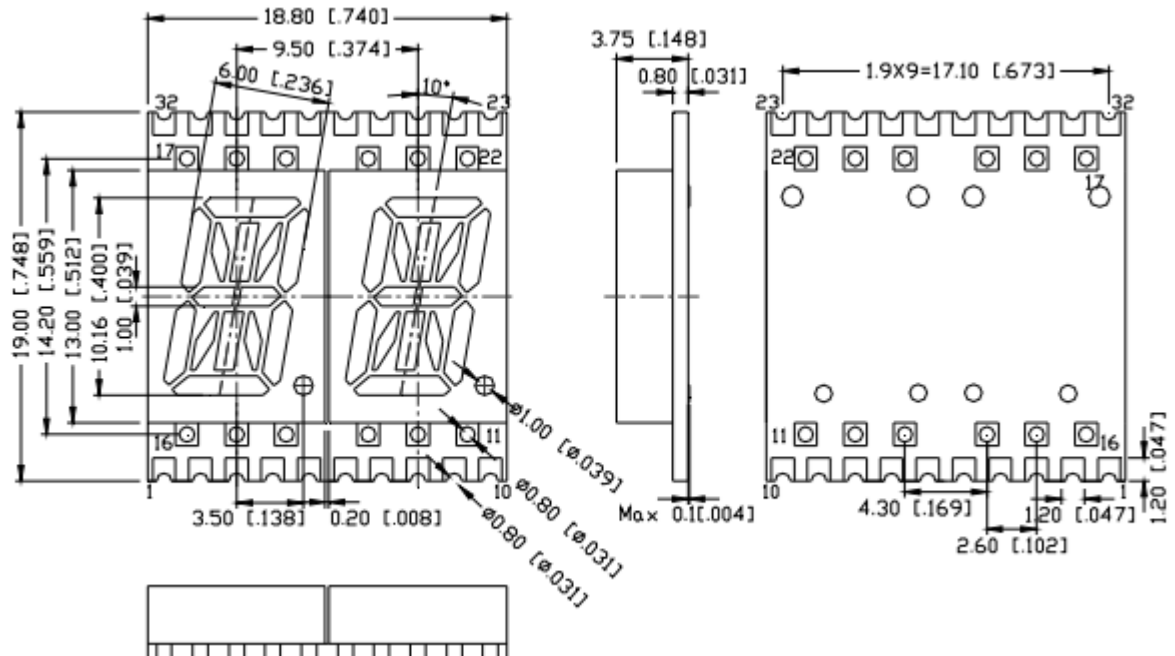


**SPECIFICATIONS** **SDDCN40Y2W**

### OUTLINES DIMENSIONS



The technical drawing shows three views of the SDDCN40Y2W LED package:

- Top View:** Shows a rectangular package with a total width of 18.80 mm [0.740] and a total height of 19.00 mm [0.748]. It features two central lens segments and two side segments. Dimensions include a 9.50 mm [0.374] distance between lens centers, a 6.00 mm [0.236] lens width, and a 10° lens angle. Pin locations are marked with numbers 11, 16, 17, 22, and 32.
- Side View:** Shows the package height of 3.75 mm [0.148] and a maximum thickness of 0.1 mm [0.004]. A 0.80 mm [0.031] dimension is shown for the top edge.
- Bottom View:** Shows the common cathode pin configuration. The total width is 19x9=17.10 mm [0.673]. Pin locations are marked with numbers 10, 11, 16, 17, 22, and 32. Dimensions include a 4.30 mm [0.169] distance between pins and a 2.60 mm [0.102] distance between the bottom edge and the first pin.

**Notes:**

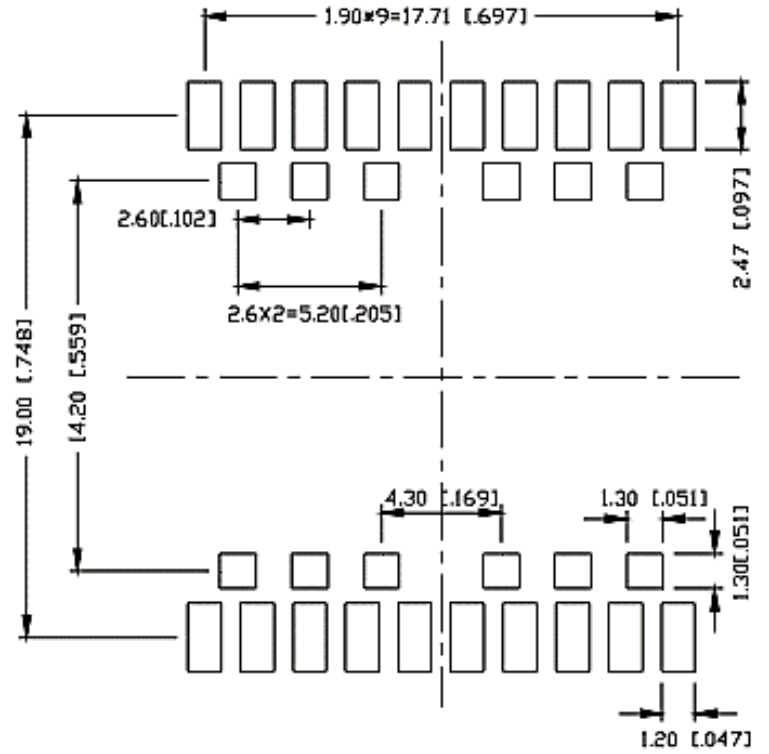
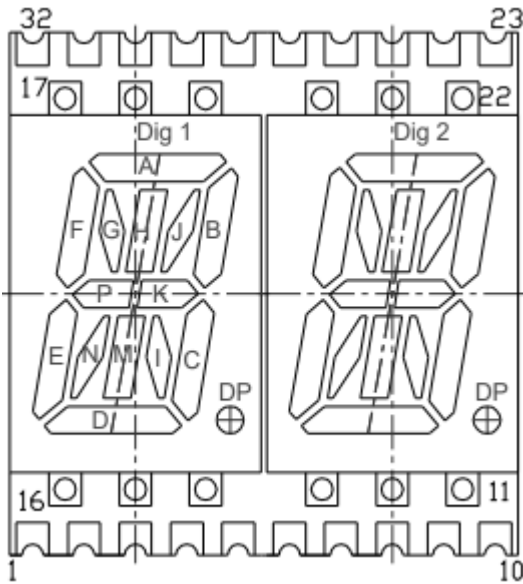
1. All Dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}$  (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Description
SDDCN40Y2W	InGaAlP	Yellow	White Segment	Common Cathode

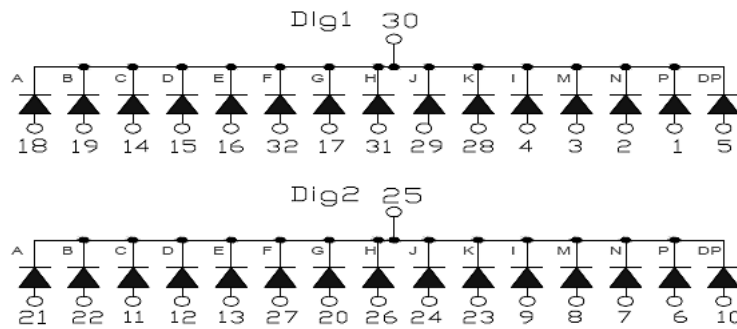


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## TYPICAL INTERNAL EQUIVALENT CIRCUIT



### Common Cathode



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

Parameter	Symbol	Max Rating	Unit
Power Dissipation	PD	70	mW
Pulse Forward Current	IFP	90	mA
Continuous Forward Current	IF	25	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	-	15	-	mcd
Forward Voltage (Per Dice)	VF	IF = 20mA	-	2.0	2.8	V
Reverse Leakage Current	IR	VR = 5V	-	-	10	µA
Dominant Wavelength	λd	IF = 20mA	-	590	-	nm
Peak Wavelength	Δp	IF = 20mA	-	592	-	nm



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## OPTICAL CHARACTERISTIC CURVES

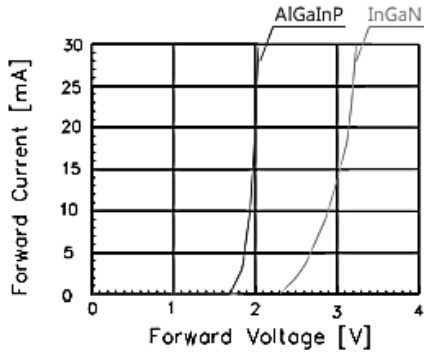


Fig 1. Forward Current vs. Forward Voltage

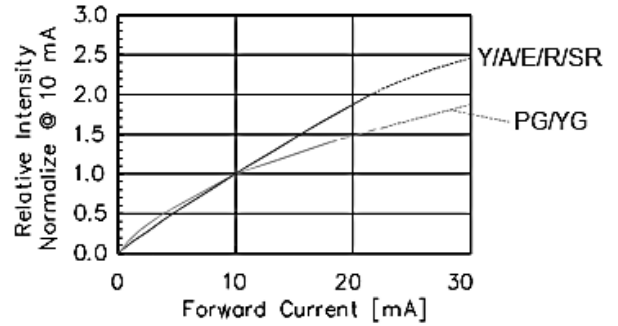


Fig 2. Relative Intensity vs. Forward Current

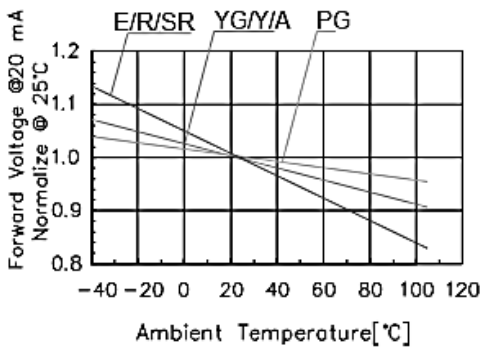


Fig 3. Forward Voltage vs. Temperature

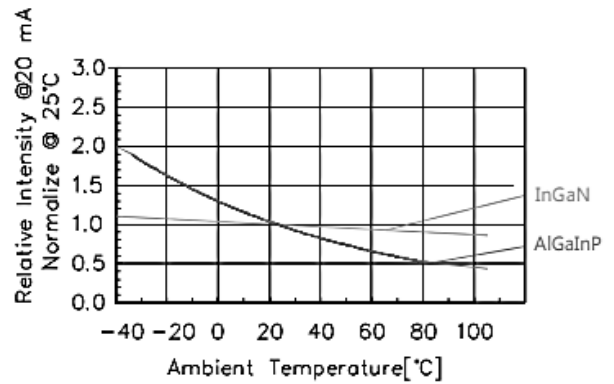


Fig 4. Relative Intensity vs. Temperature

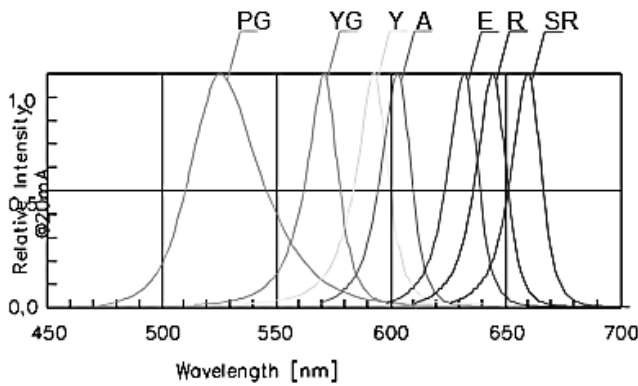


Fig 5. Relative Intensity vs. Wavelength

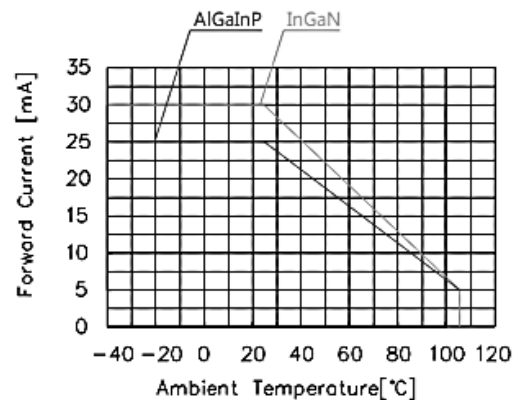


Fig 6. Forward current vs. Temperature

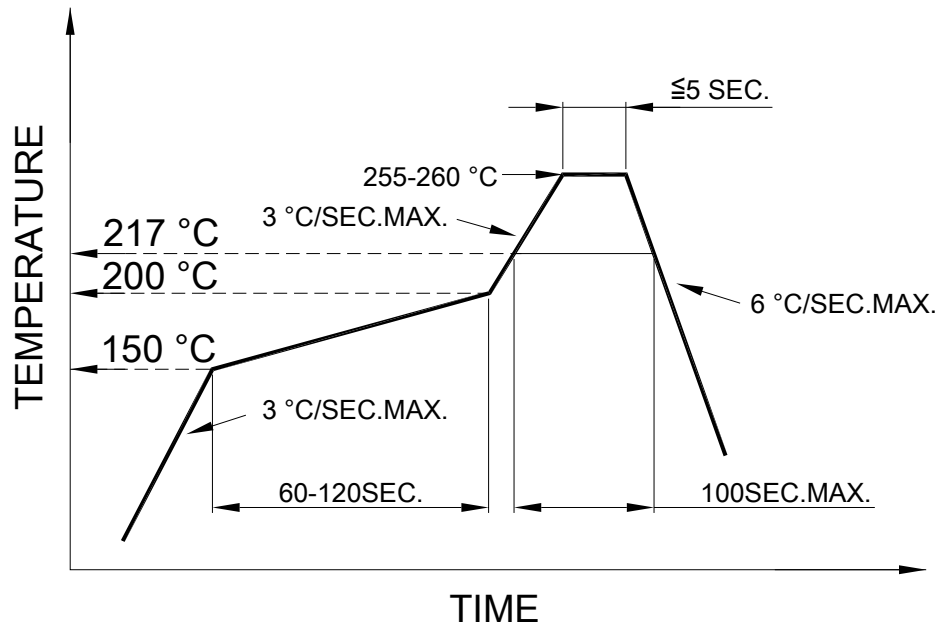


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**SOLDERING CONDITIONS – DISPLAY TYPE LED**
**● SMT REFLOW SOLDERING INSTRUCTIONS**

SMT Soldering Profile

Pb free reflow soldering Profile


**● SOLDERING IRON**

Basic spec is  $\leq 4$  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**

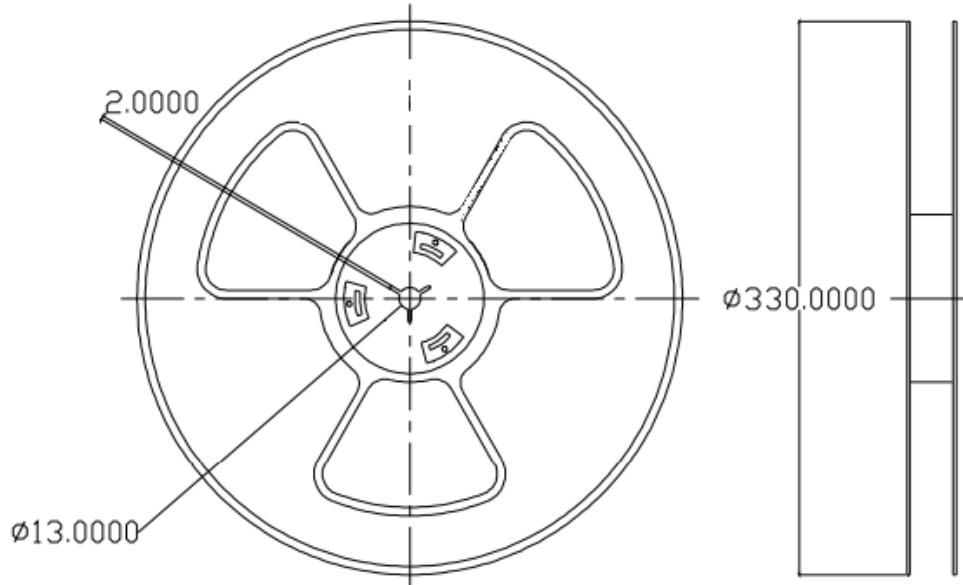
- Customer must finish rework within 3 sec. under 350°C.
- The head of soldering iron cannot touch copper foil.



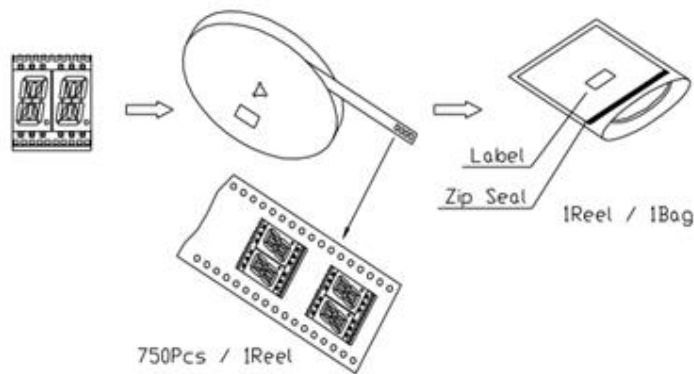
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## PACKAGING SPECIFICATION

### 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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