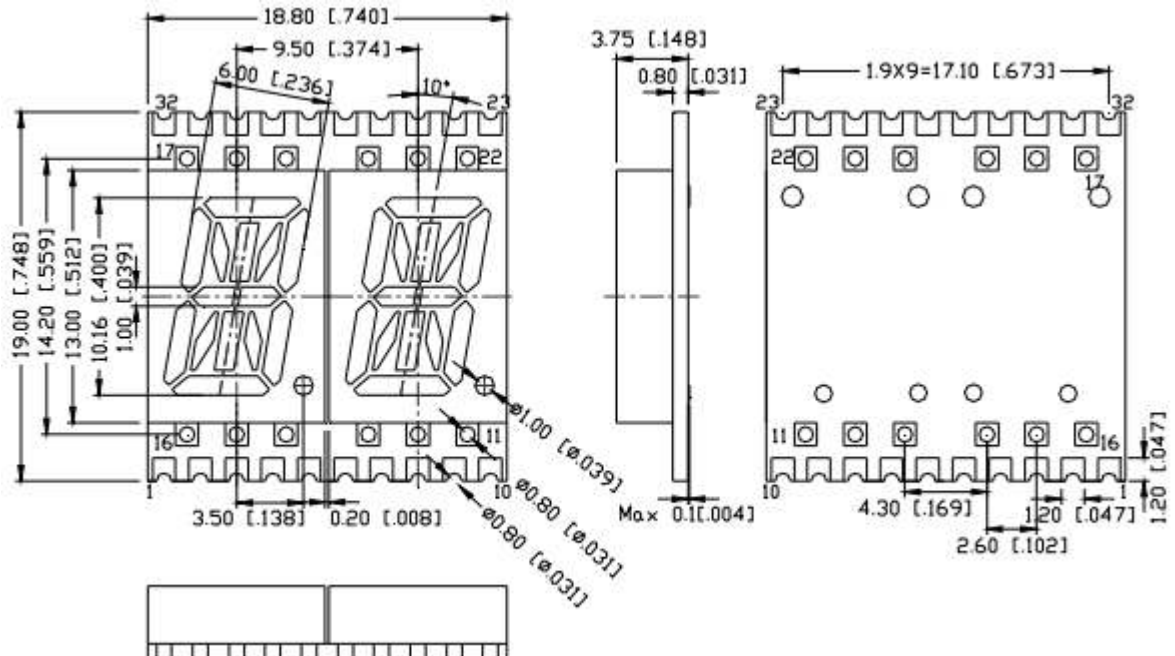


**SPECIFICATIONS** **SDDCN40GT2W**

### OUTLINES DIMENSIONS



The technical drawing shows the following dimensions:

- Top View:** Total width 18.80 [0.740], distance between chip centers 9.50 [0.374], chip width 6.00 [0.236], chip height 10°, chip offset 2.3, chip pitch 3.50 [0.138], chip offset 0.20 [0.008].
- Side View:** Total height 3.75 [0.148], chip height 0.80 [0.031], chip thickness Max 0.1 [0.004].
- Bottom View:** Total width 19x9=17.10 [0.673], chip pitch 4.30 [0.169], chip offset 1.20 [0.047], chip offset 2.60 [0.102].

**Notes:**

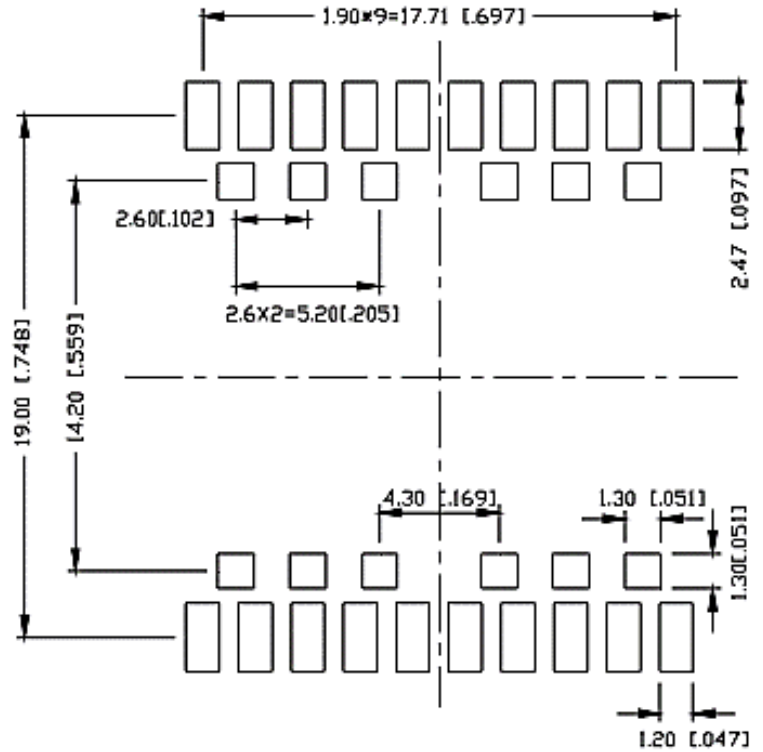
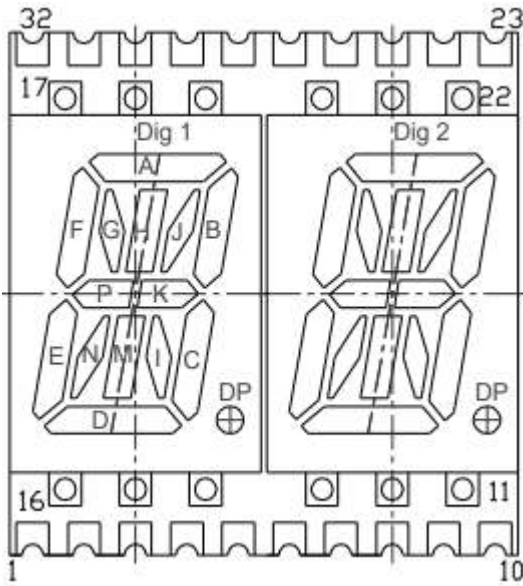
1. All Dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}$  (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Description
SDDCN40GT2W	InGaN	Green	White Segment	Common Cathode

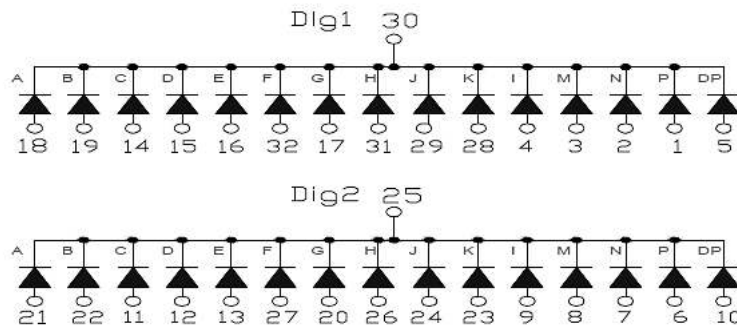


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## TYPICAL INTERNAL EQUIVALENT CIRCUIT



### Common Cathode



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

Parameter	Symbol	Max Rating	Unit
Power Dissipation	PD	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	-	100	-	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	-	525	-	nm
Peak Wavelength	Δp	IF = 20mA	-	-	-	nm



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## OPTICAL CHARACTERISTIC CURVES

### ELECTRICAL/OPTICAL CHARACTERISTICS CURVES

(Ta=25°C)

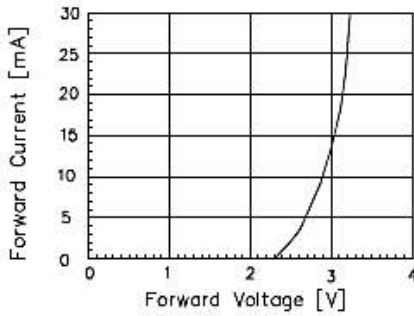


Fig 1. Forward Current vs. Forward Voltage

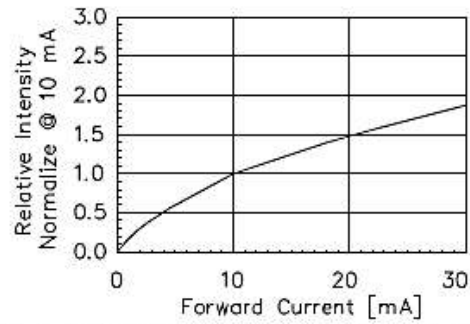


Fig 2. Relative Intensity vs. Forward Current

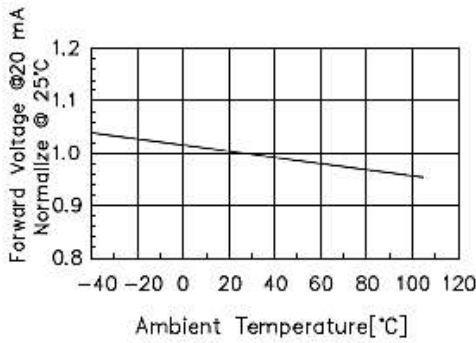


Fig 3. Forward Voltage vs. Temperature

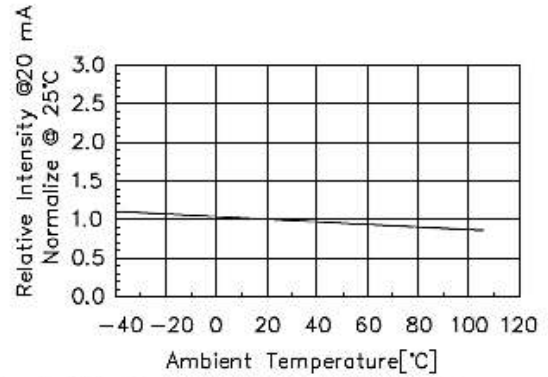


Fig 4. Relative Intensity vs. Temperature

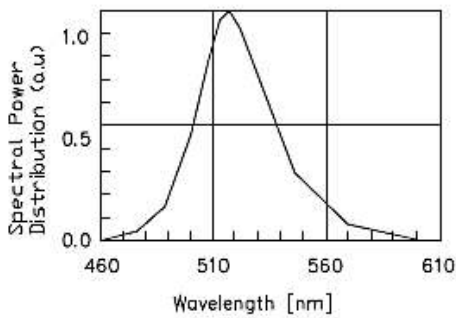


Fig 5. Spectral Power Distribution vs. Wavelength

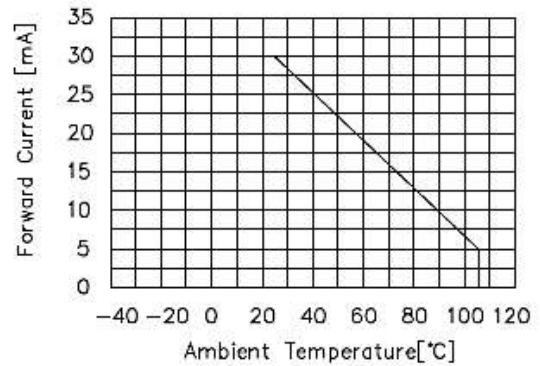


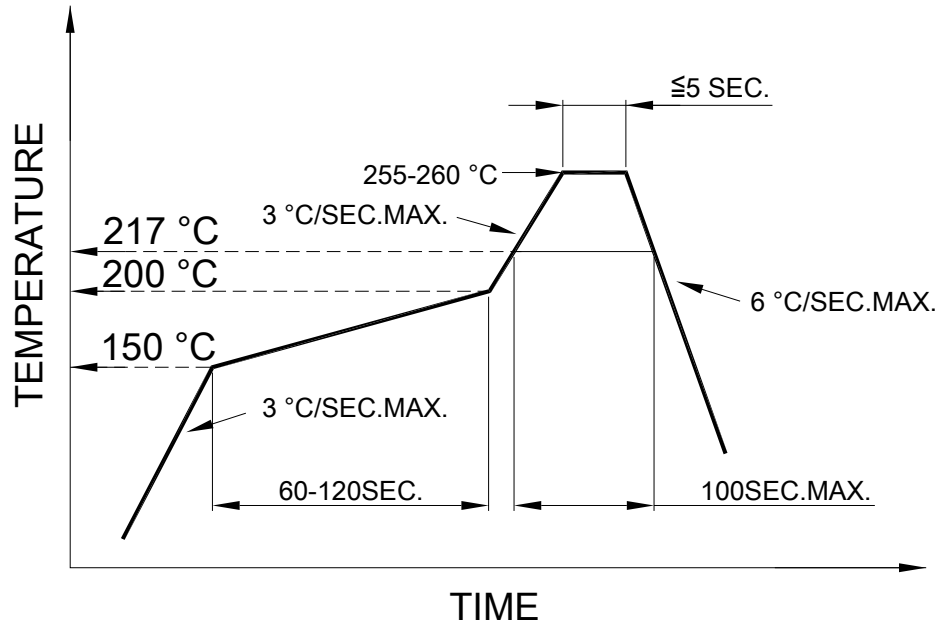
Fig 6. Forward current vs. Temperature



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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**

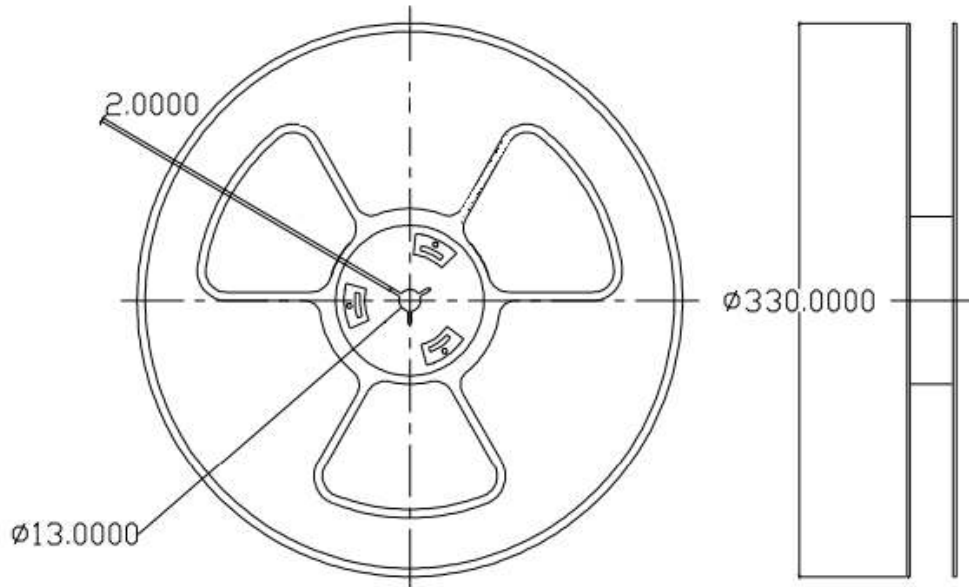
- Customer must finish rework within 3 sec. under 350°C.
- The head of soldering iron cannot touch copper foil.



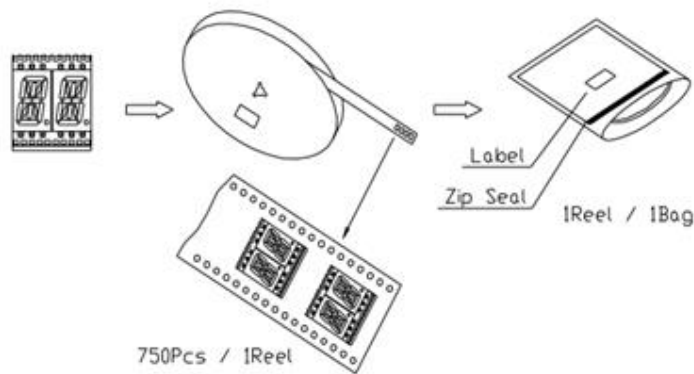
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**PACKAGING SPECIFICATION**

**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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