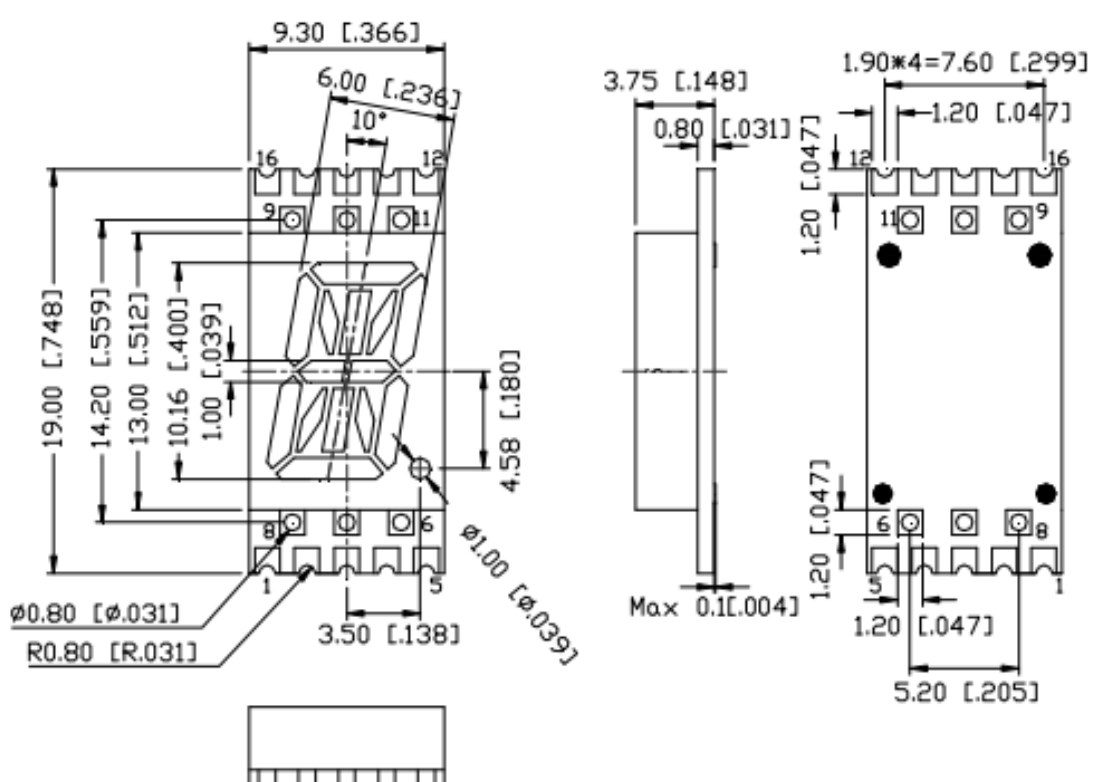


**SPECIFICATIONS** **SDSAN40GT2W**

### OUTLINES DIMENSIONS



The technical drawing shows the following dimensions:

- Top View:** Total width 9.30 [0.366], chip width 6.00 [0.236] at a 10° angle, mounting pad width 1.90\*4=7.60 [0.299], and a central distance of 1.20 [0.047].
- Side View:** Total height 19.00 [0.748], mounting pad height 3.75 [0.148], and a maximum lead thickness of 0.1 [0.004].
- Bottom View:** Total width 5.20 [0.205], mounting pad width 1.20 [0.047], and a central distance of 1.20 [0.047].
- Other Dimensions:** 14.20 [0.559], 13.00 [0.512], 10.16 [0.400], 1.00 [0.039], 4.58 [0.180], 3.50 [0.138], 0.80 [0.031] (hole diameter), and R0.80 [R.031] (fillet radius).

**Notes:**

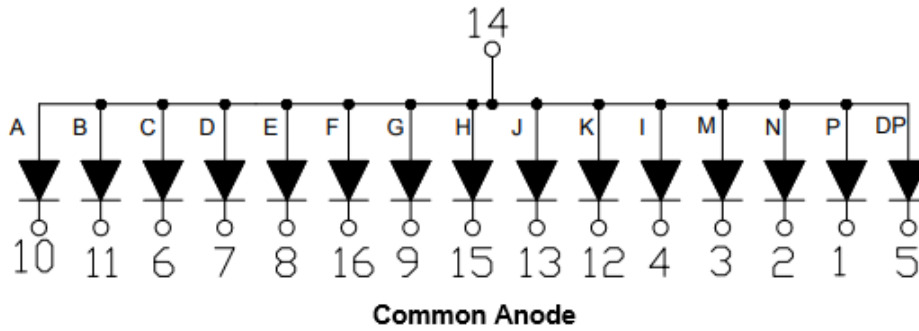
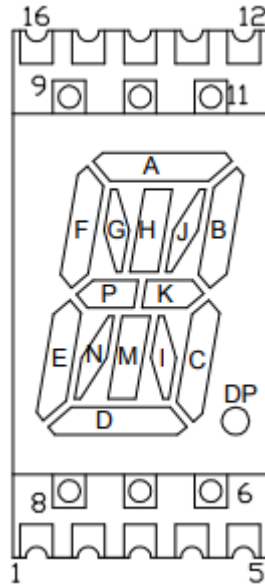
1. All Dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}$  (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

| Part Number | Chip Material | Color of Emission | Lens Type     | Description  |
|-------------|---------------|-------------------|---------------|--------------|
| SDSAN40GT2W | InGaN         | Green             | White Segment | Common Anode |



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TYPICAL INTERNAL EQUIVALENT CIRCUIT



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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      | -     | 112 | -   | mcd  |
| Forward Voltage (Per Dice) | VF     | IF = 20mA      | -     | 3.2 | 3.8 | V    |
| Reverse Leakage Current    | IR     | VR = 5V        | -     | -   | 100 | µA   |
| Dominant Wavelength        | λd     | IF = 20mA      | -     | 525 | -   | nm   |
| Peak Wavelength            | Δp     | IF = 20mA      | -     | 525 | -   | nm   |



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## OPTICAL CHARACTERISTIC CURVES

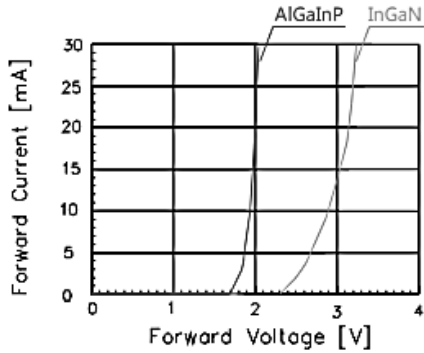


Fig 1. Forward Current vs. Forward Voltage

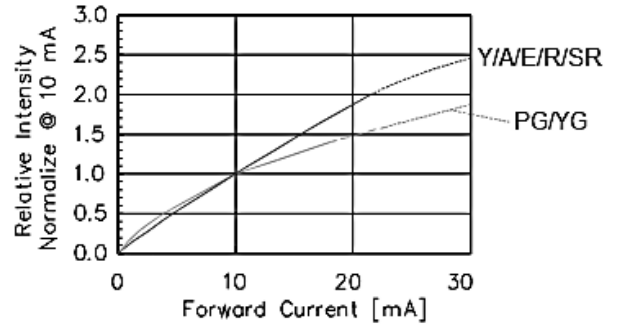


Fig 2. Relative Intensity vs. Forward Current

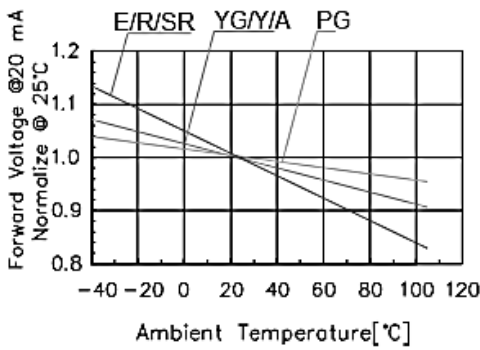


Fig 3. Forward Voltage vs. Temperature

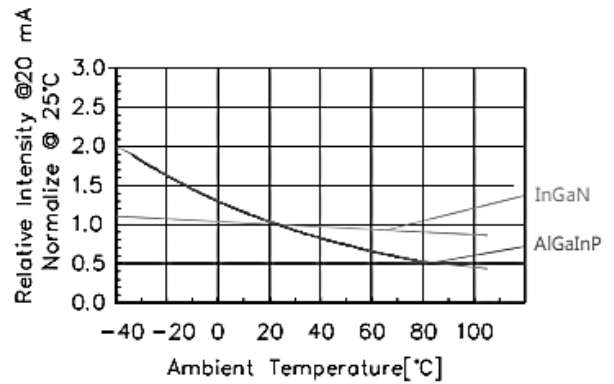


Fig 4. Relative Intensity vs. Temperature

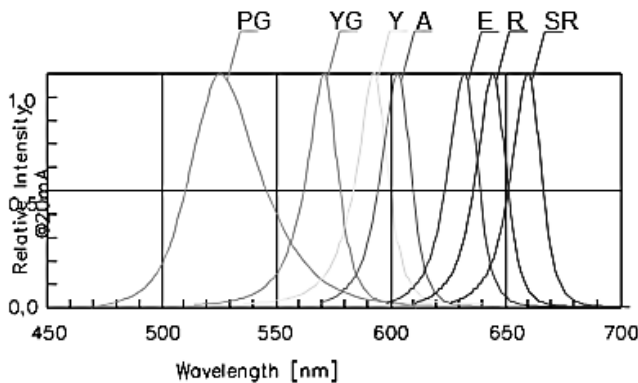


Fig 5. Relative Intensity vs. Wavelength

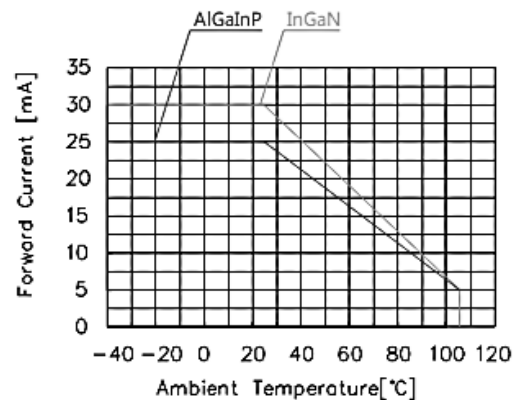


Fig 6. Forward current vs. Temperature

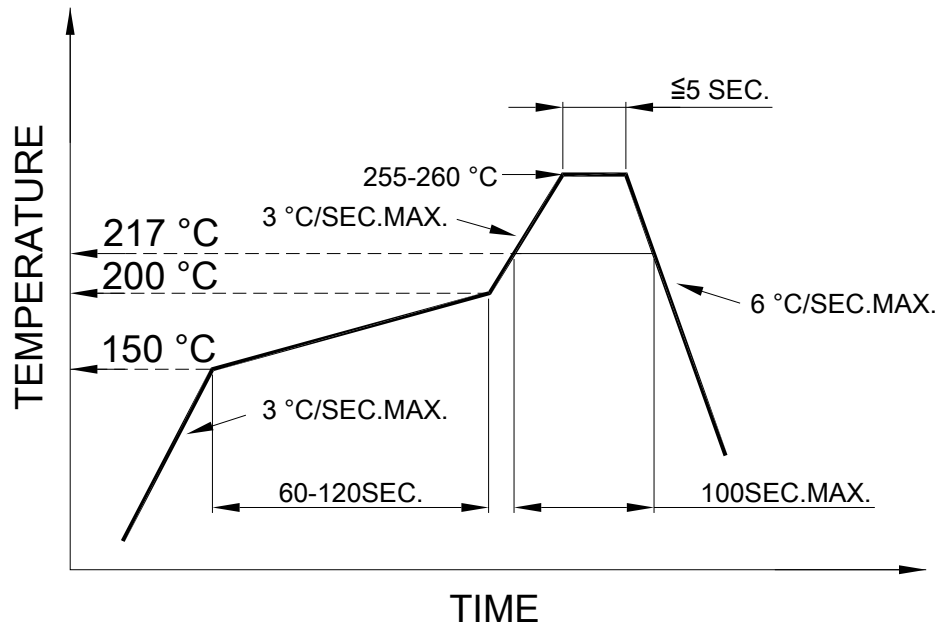


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**SOLDERING CONDITIONS – DISPLAY TYPE LED**
**● SMT REFLOW SOLDERING INSTRUCTIONS**

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**

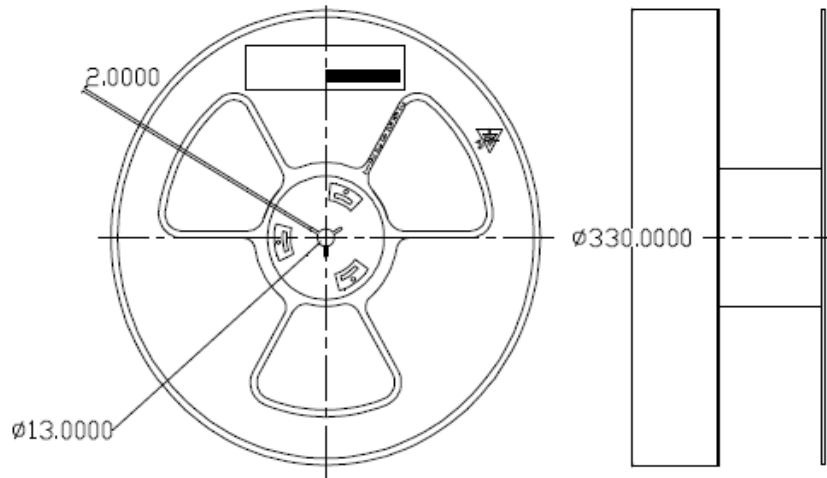
- Customer must finish rework within 3 sec. under 350°C.
- The head of soldering iron cannot touch copper foil.



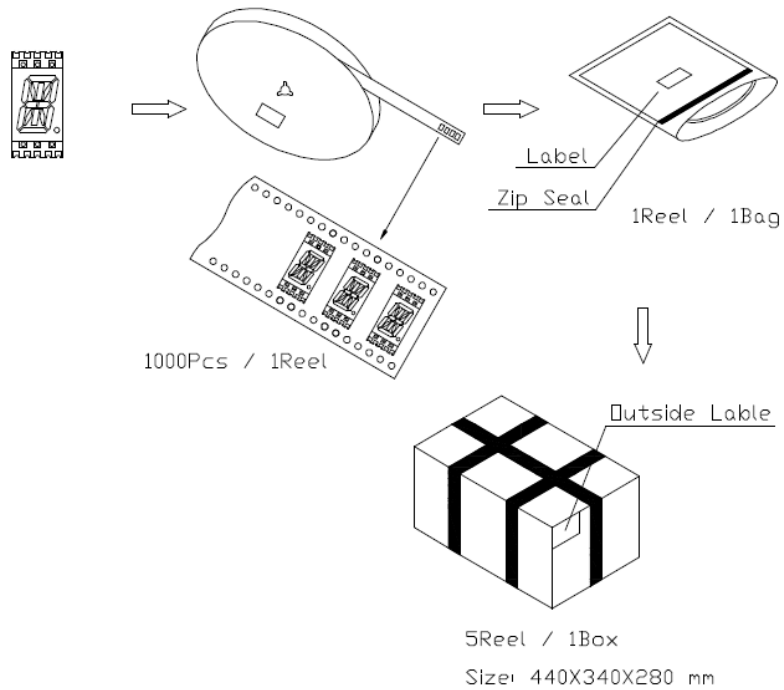
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## PACKAGING SPECIFICATION

### REEL DIMENSION



### Packing & Label Specifications



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