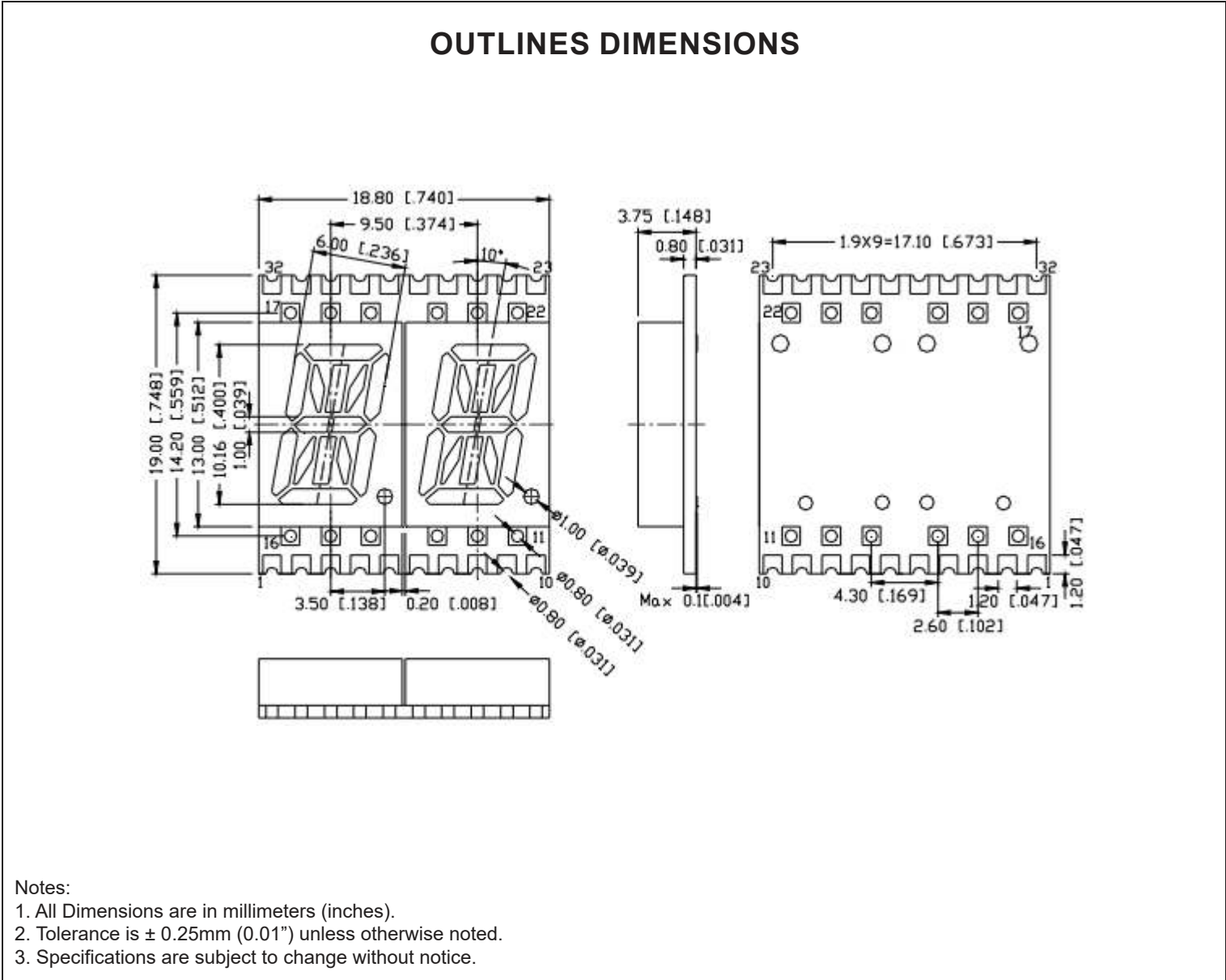


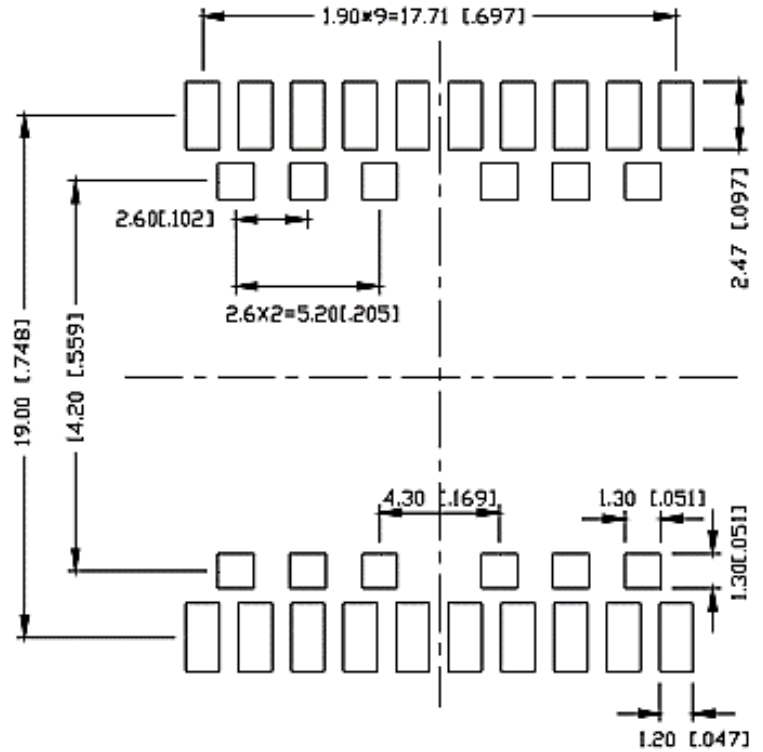
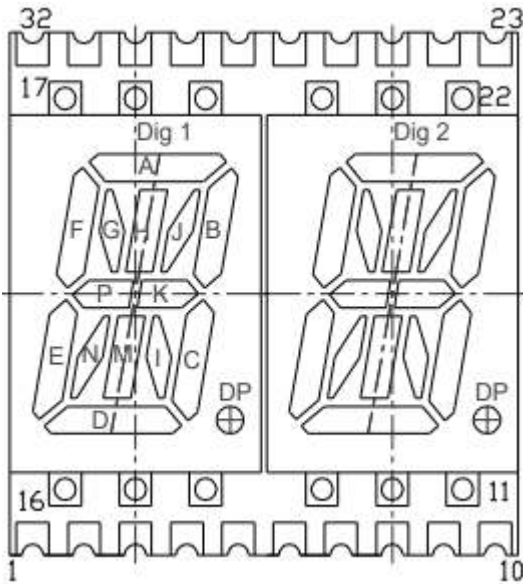
**SPECIFICATIONS** **SDDCN40B2W**


| Part Number | Chip Material | Color of Emission | Lens Type     | Description    |
|-------------|---------------|-------------------|---------------|----------------|
| SDDCN40B2W  | InGaN         | Blue              | White Segment | Common Cathode |

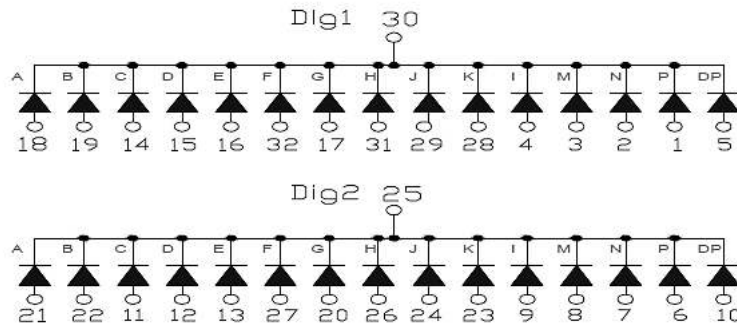


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## TYPICAL INTERNAL EQUIVALENT CIRCUIT



### 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      | -     | 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

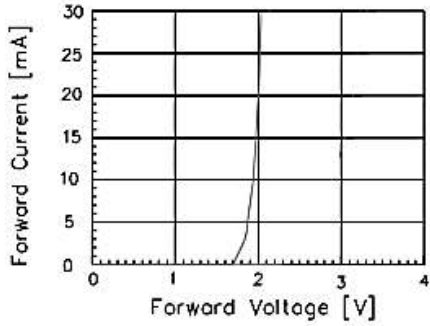


Fig 1. Forward Current vs. Forward Voltage

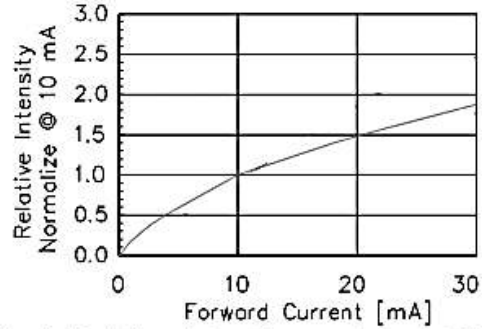


Fig 2. Relative Intensity vs. Forward Current

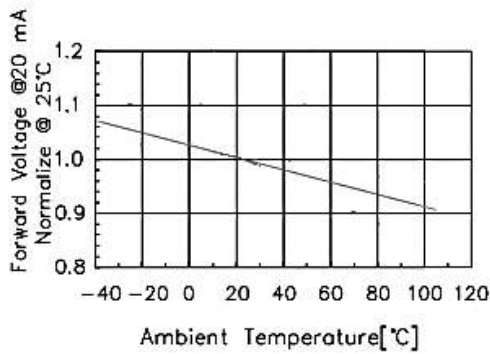


Fig 3. Forward Voltage vs. Temperature

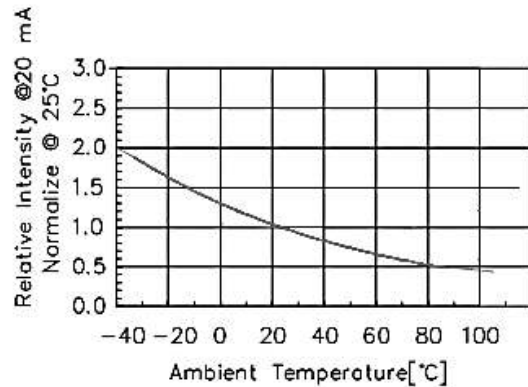


Fig 4. Relative Intensity vs. Temperature

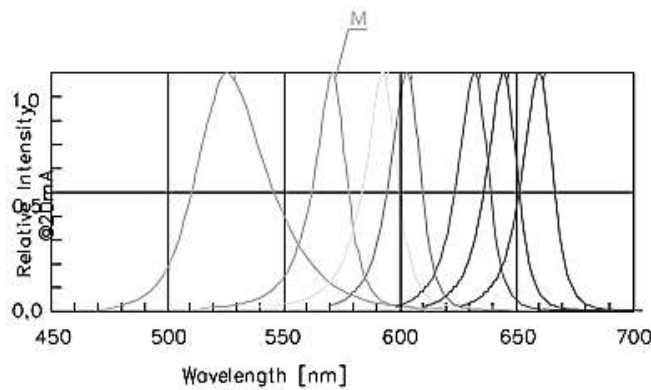


Fig 5. Relative Intensity vs. Wavelength

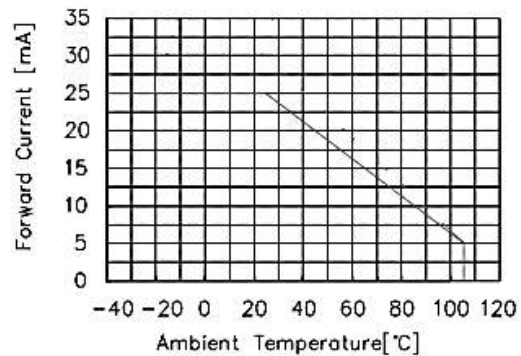


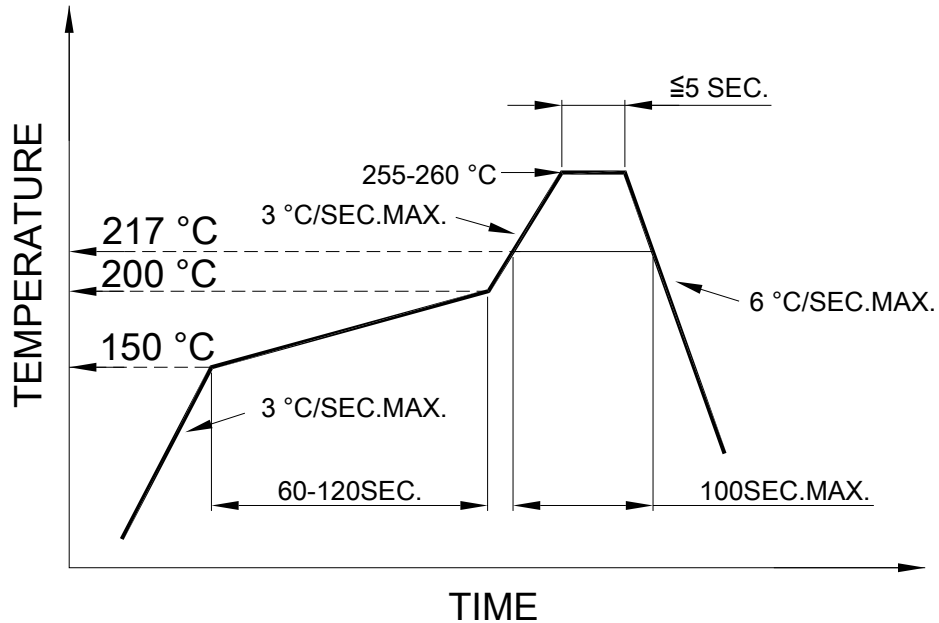
Fig 6. Forward current vs. Temperature



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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  $\leq 4$  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**

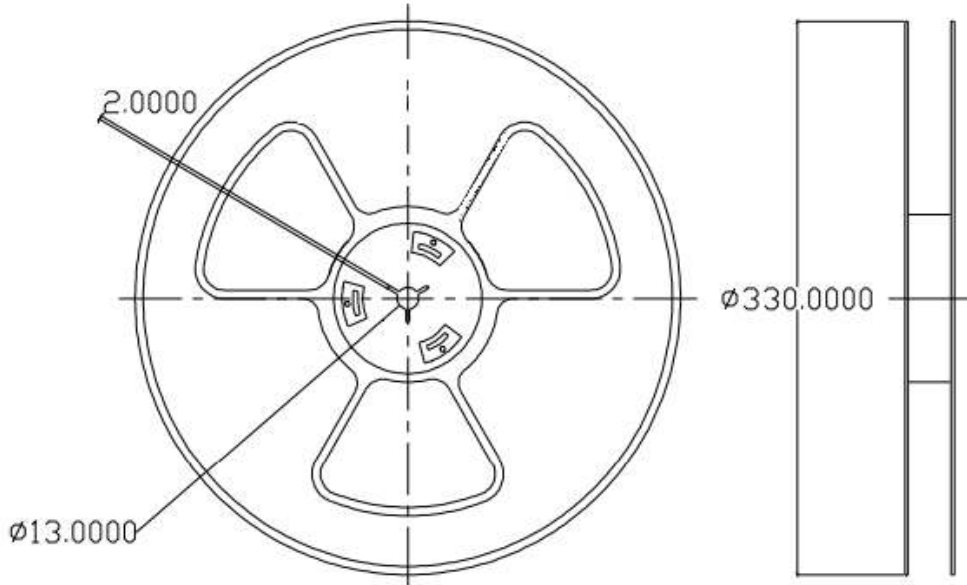
- Customer must finish rework within 3 sec. under 350°C.
- The head of soldering iron cannot touch copper foil.



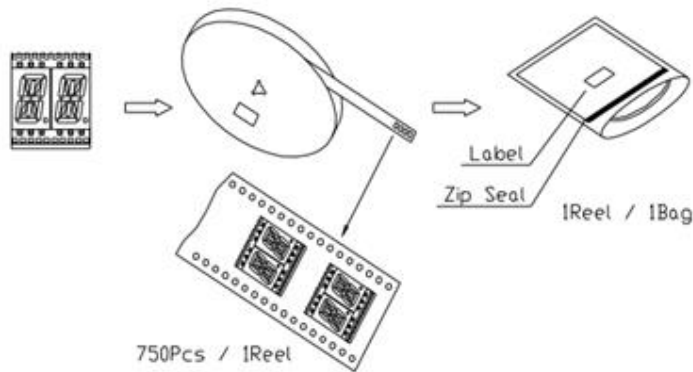
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**PACKAGING SPECIFICATION**

**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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