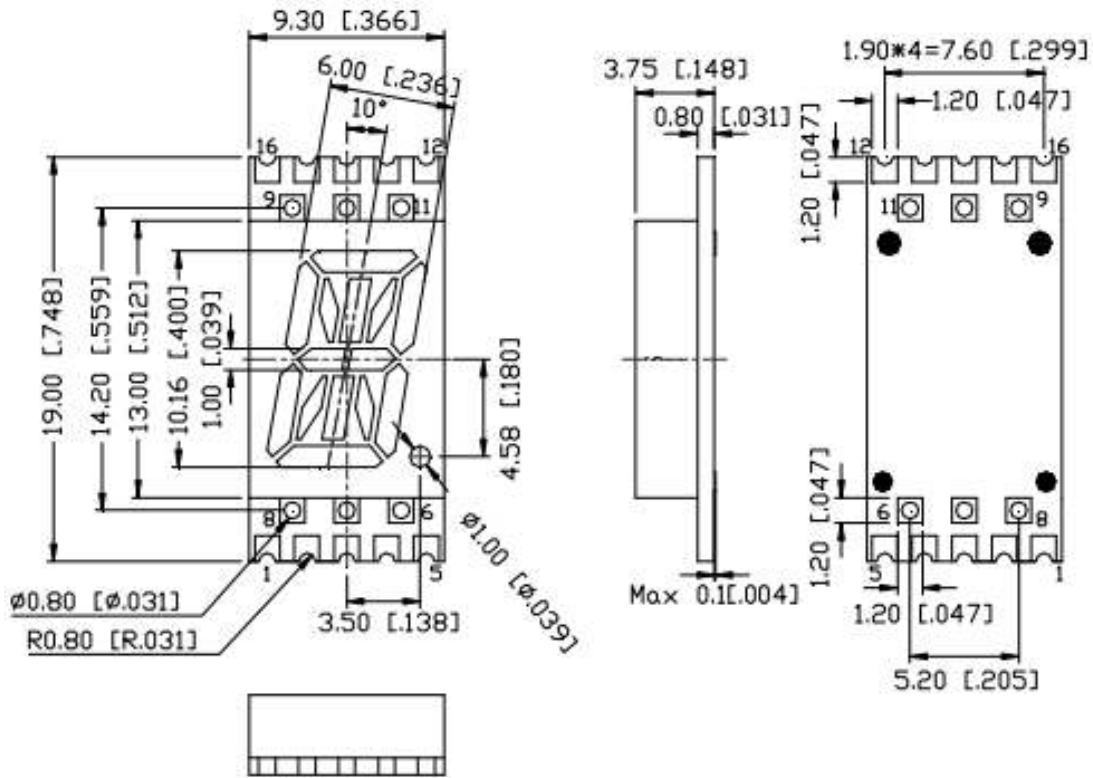


SPECIFICATIONS SDSAN40R2W
OUTLINES DIMENSIONS


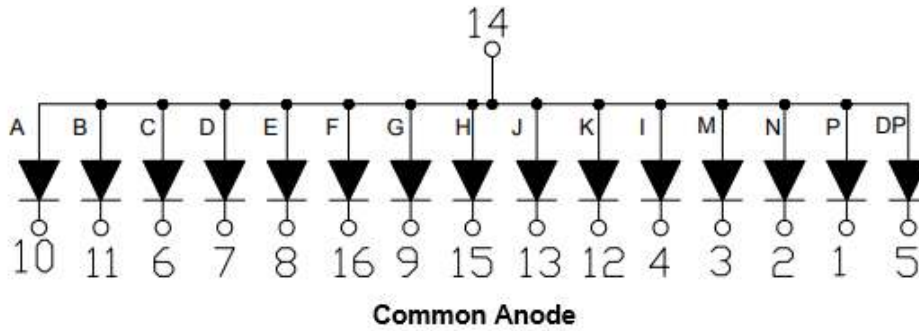
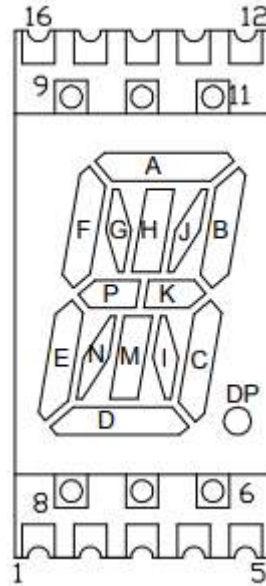
- Notes:
1. All Dimensions are in millimeters (inches).
 2. Tolerance is $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
 3. Specifications are subject to change without notice.

| Part Number | Chip Material | Color of Emission | Lens Type | Description |
|-------------|---------------|-------------------|---------------|--------------|
| SDSAN40R2W | InGaAlP | Red | White Segment | Common Anode |



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

TYPICAL INTERNAL EQUIVALENT CIRCUIT



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

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 | - | 7 | - | mcd |
| Forward Voltage (Per Dice) | VF | IF = 20mA | - | 2.0 | 2.8 | V |
| Reverse Leakage Current | IR | VR = 5V | - | - | 100 | µA |
| Dominant Wavelength | λd | IF = 20mA | - | 630 | - | nm |
| Peak Wavelength | Δp | IF = 20mA | - | 644 | - | nm |



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

OPTICAL CHARACTERISTIC CURVES

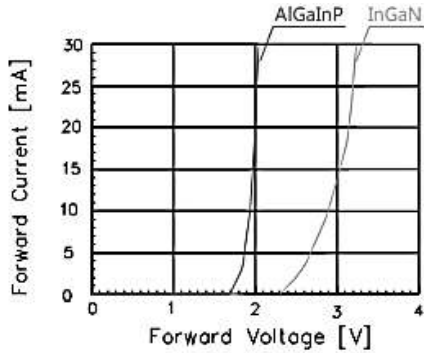


Fig 1. Forward Current vs. Forward Voltage

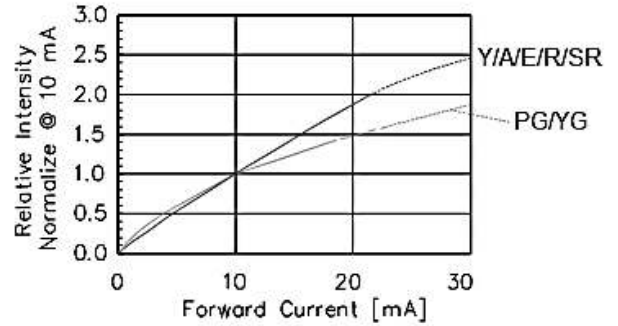


Fig 2. Relative Intensity vs. Forward Current

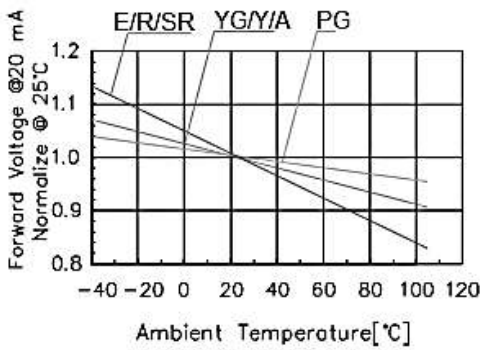


Fig 3. Forward Voltage vs. Temperature

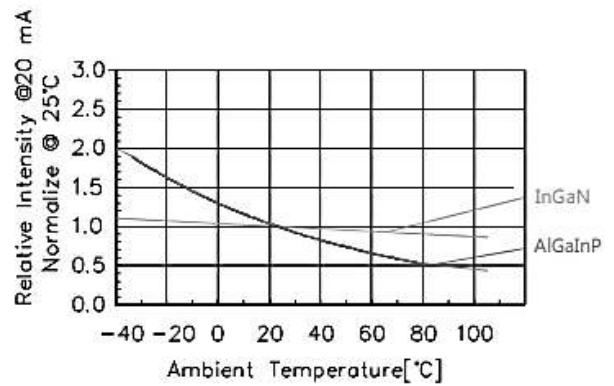


Fig 4. Relative Intensity vs. Temperature

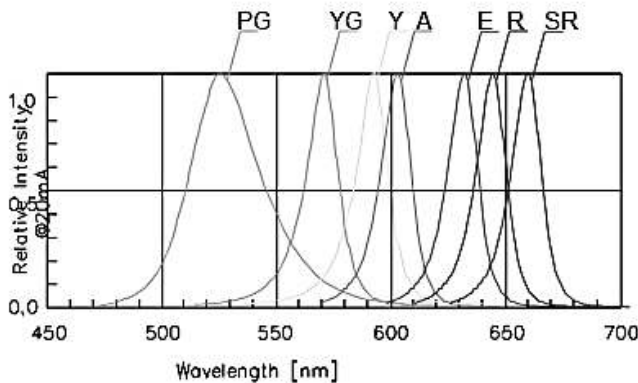


Fig 5. Relative Intensity vs. Wavelength

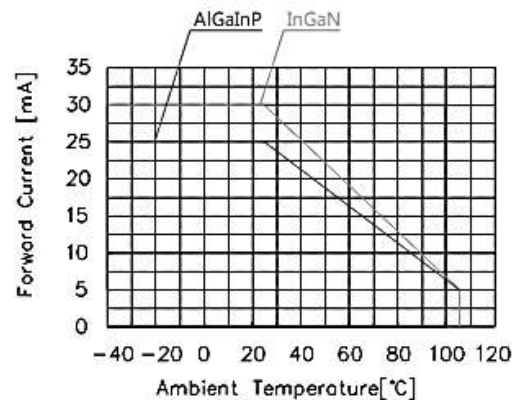


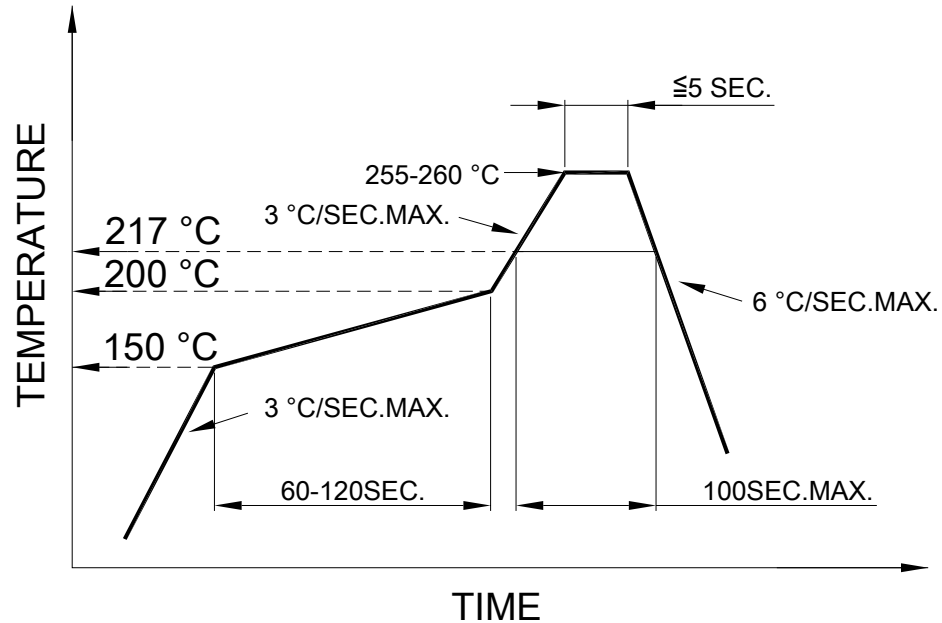
Fig 6. Forward current vs. Temperature



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

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

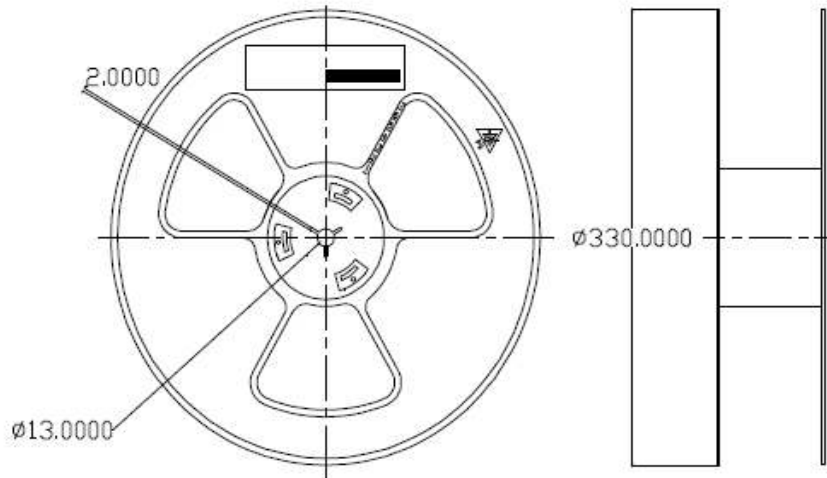
- Customer must finish rework within 3 sec. under 350°C.
- The head of soldering iron cannot touch copper foil.



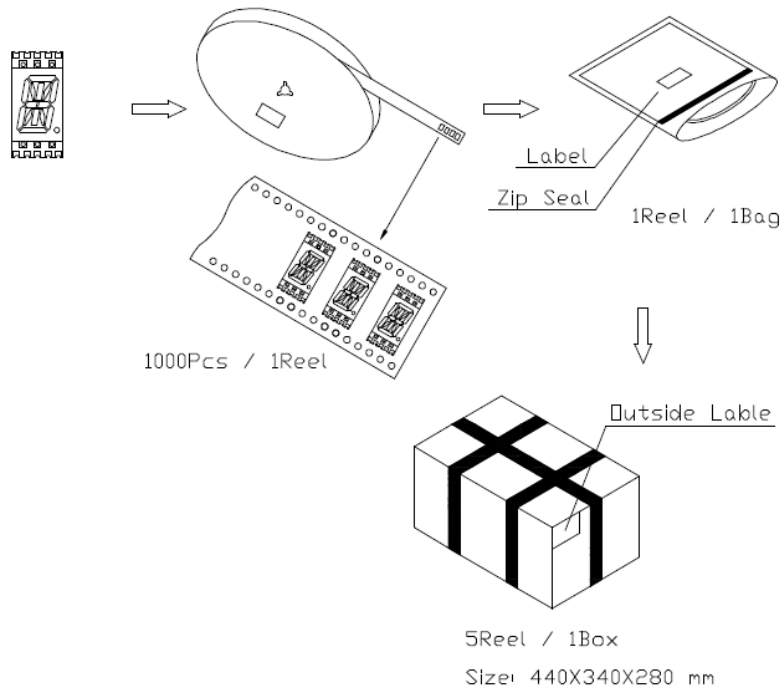
ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

PACKAGING SPECIFICATION

REEL DIMENSION



Packing & Label Specifications



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com