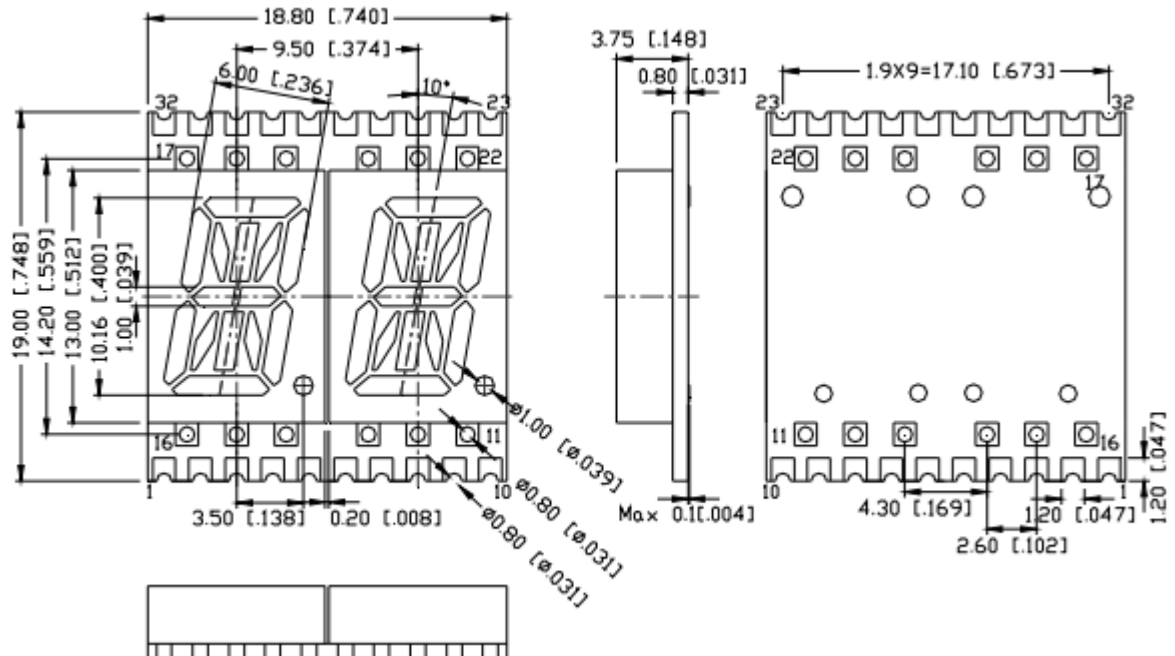


**SPECIFICATIONS** **SDDAN40RR2W**

### OUTLINES DIMENSIONS



The technical drawing shows the following dimensions:

- Top View:** Total width 18.80 [0.740], total height 19.00 [0.748]. Pin pitch is 1.00 [0.039]. Pin 1 is at the bottom center.
- Side View:** Total height 3.75 [0.148]. Lead height 0.80 [0.031]. Lead thickness Max 0.1 [0.004].
- Bottom View:** Pin pitch 1.00 [0.039]. Pin 10 is at the bottom center. Pin 11 is 0.20 [0.008] from the center. Pin 16 is 4.30 [0.169] from the center. Pin 22 is 1.20 [0.047] from the right edge. Pin 23 is 1.20 [0.047] from the left edge. Total width 19x9=17.10 [0.673].

**Notes:**

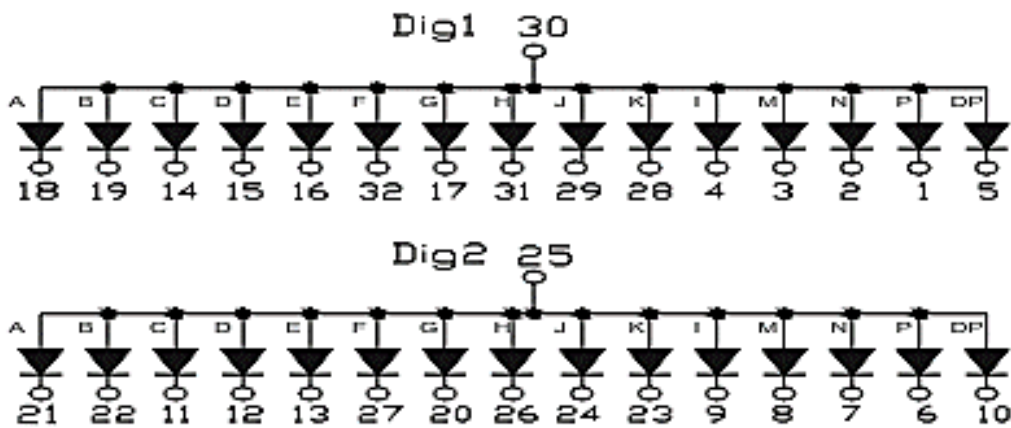
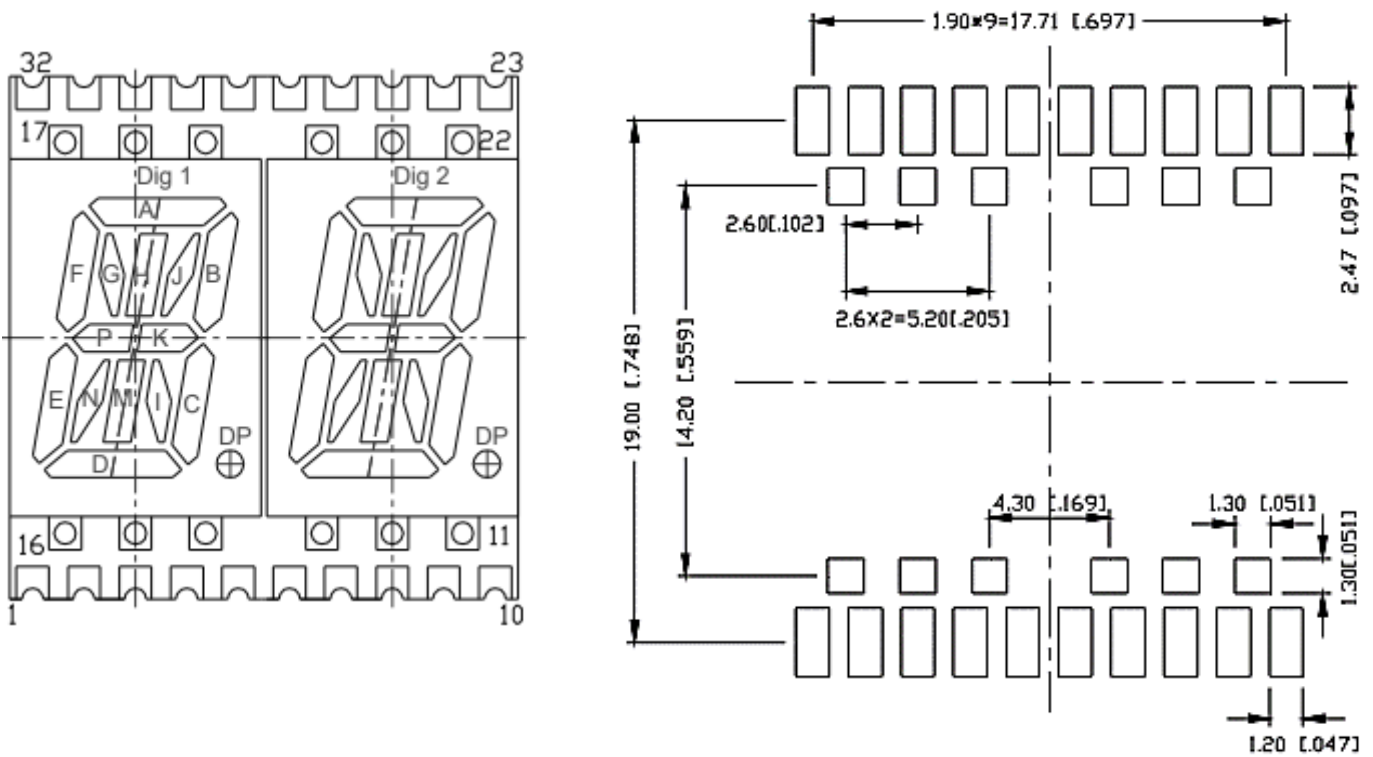
1. All Dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}$  (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Description
SDDAN40RR2W	InGaAlP	Deep 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](http://www.chromeled.com)

## TYPICAL INTERNAL EQUIVALENT CIRCUIT



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](http://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	-	4	-	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	-	640	-	nm
Peak Wavelength	Δp	IF = 20mA	-	660	-	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](http://www.chromeled.com)

## OPTICAL CHARACTERISTIC CURVES

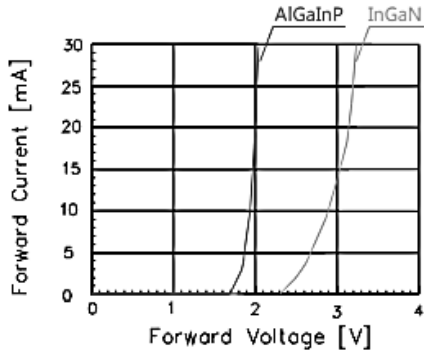


Fig 1. Forward Current vs. Forward Voltage

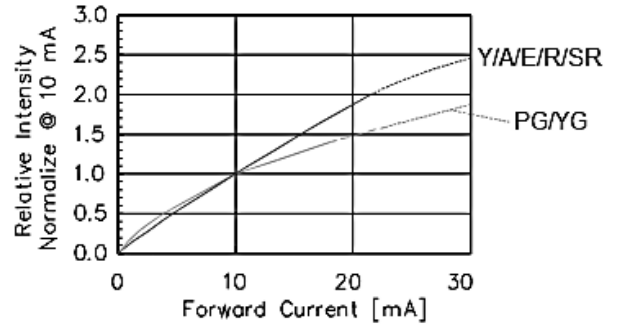


Fig 2. Relative Intensity vs. Forward Current

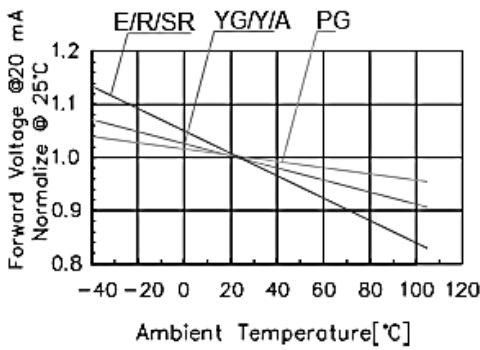


Fig 3. Forward Voltage vs. Temperature

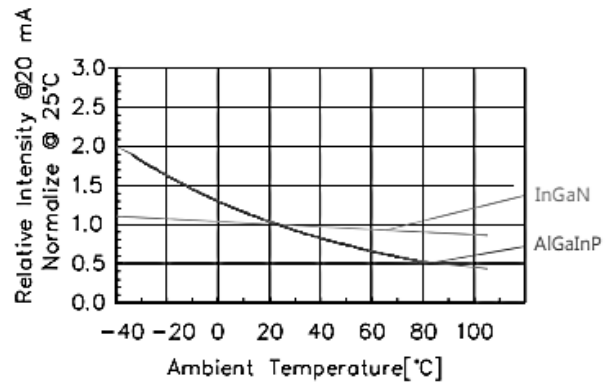


Fig 4. Relative Intensity vs. Temperature

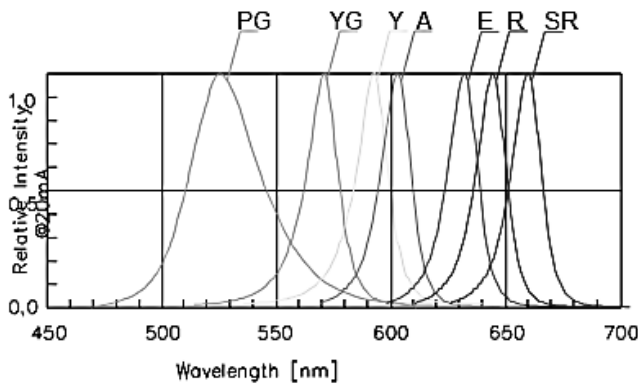


Fig 5. Relative Intensity vs. Wavelength

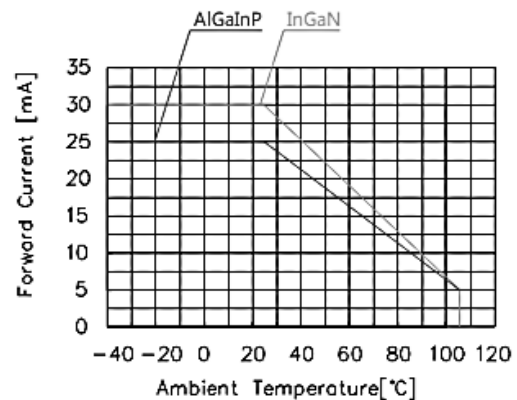


Fig 6. Forward current vs. Temperature



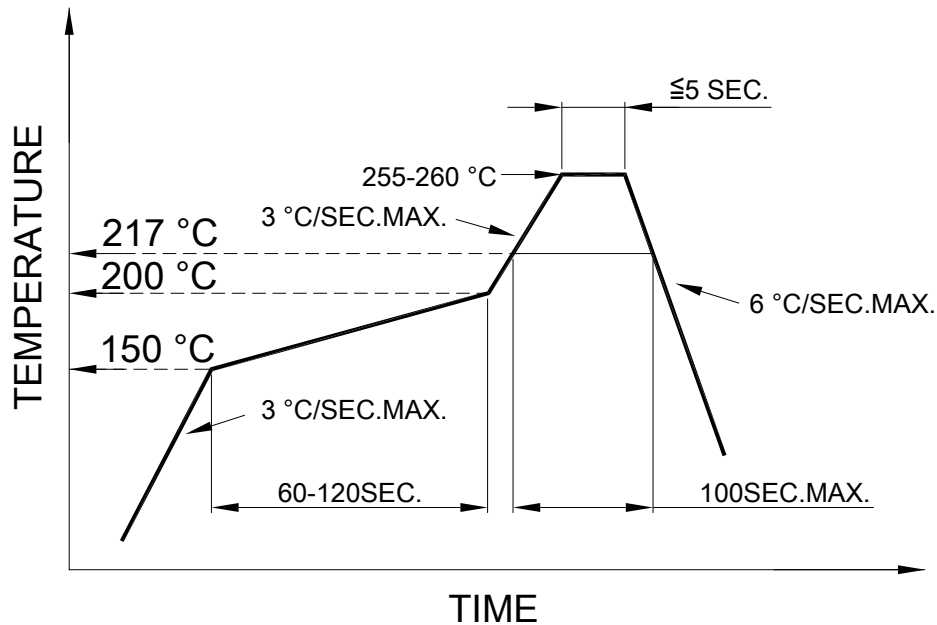
ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: [www.chromeled.com](http://www.chromeled.com)

## SOLDERING CONDITIONS – DISPLAY TYPE LED

### ● SMT REFLOW SOLDERING INSTRUCTIONS

SMT Soldering Profile

Pb free reflow soldering Profile



### ● SOLDERING IRON

Basic spec is  $\leq 4$  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

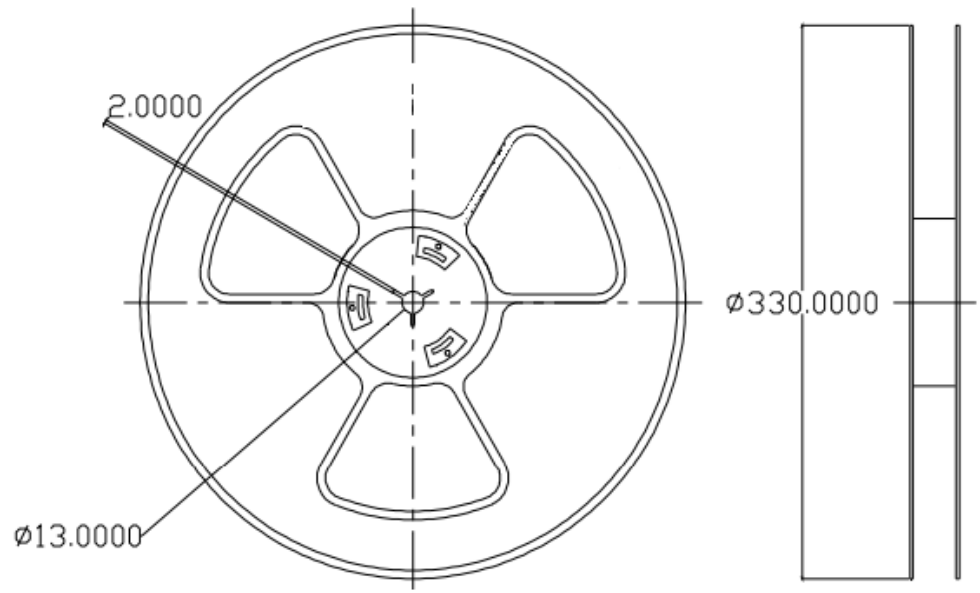
- Customer must finish rework within 3 sec. under 350°C.
- The head of soldering iron cannot touch copper foil.



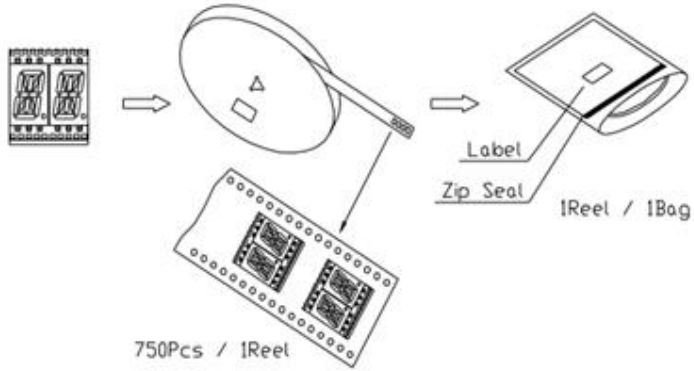
ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: [www.chromeled.com](http://www.chromeled.com)

## PACKAGING SPECIFICATION

### REEL DIMENSION



### PACKING & LABEL DIMENSIONS



Note:

1. Specifications are subject to change without notice.
2. Please contact us for the updated information.



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](http://www.chromeled.com)