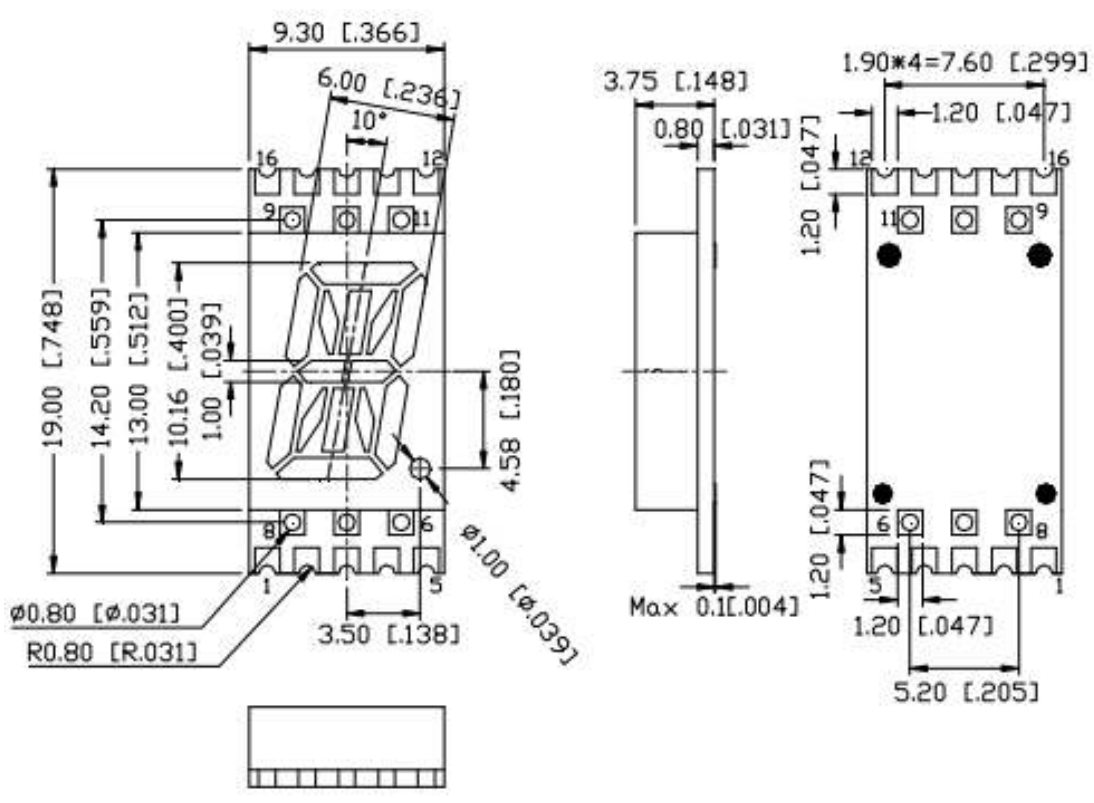


**SPECIFICATIONS** **SDSCN40A2W**

### OUTLINES DIMENSIONS



The drawing shows three views of the LED: a top view, a side view, and a bottom view. Dimensions are provided in millimeters [inches].

- Top View:** Total width 9.30 [0.366]. Distance from center to the edge of the lens is 6.00 [0.236] at a 10° angle. The lens diameter is 4.58 [0.180]. The distance between the two rows of pins is 3.50 [0.138]. Pin pitch is 1.20 [0.047]. Pin diameter is 0.80 [0.031].
- Side View:** Total height 19.00 [0.748]. The distance from the top of the lens to the top of the pins is 14.20 [0.559]. The distance from the top of the lens to the top of the bottom pins is 13.00 [0.512]. The distance from the top of the lens to the top of the bottom pins is 10.16 [0.400]. The distance from the top of the lens to the top of the bottom pins is 1.00 [0.039]. The distance from the top of the lens to the top of the bottom pins is 0.80 [0.031]. The distance from the top of the lens to the top of the bottom pins is 0.80 [0.031]. The distance from the top of the lens to the top of the bottom pins is 0.80 [0.031].
- Bottom View:** Total width 5.20 [0.205]. Distance between the two rows of pins is 1.20 [0.047]. Pin pitch is 1.20 [0.047]. Pin diameter is 0.80 [0.031].

**Notes:**

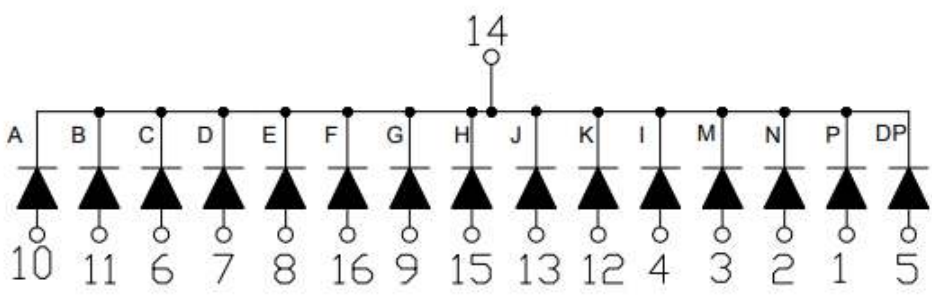
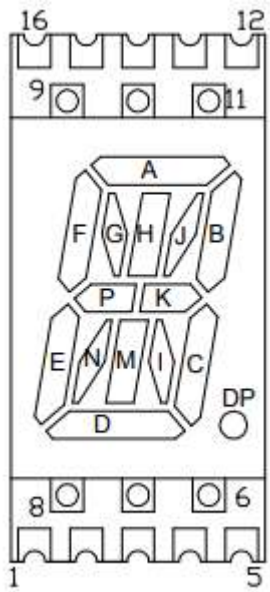
- All Dimensions are in millimeters (inches).
- Tolerance is  $\pm 0.25\text{mm}$  (0.01") unless otherwise noted.
- Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Description
SDSCN40A2W	InGaAlP	Amber	White Segment	Common Cathode



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 Cathode**



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	-	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	-	605	-	nm
Peak Wavelength	Δp	IF = 20mA	-	612	-	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

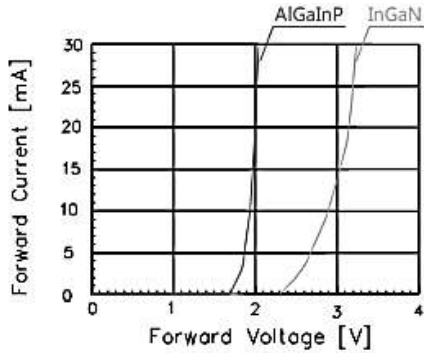


Fig 1. Forward Current vs. Forward Voltage

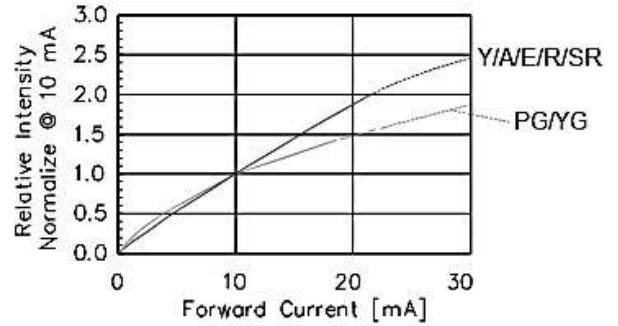


Fig 2. Relative Intensity vs. Forward Current

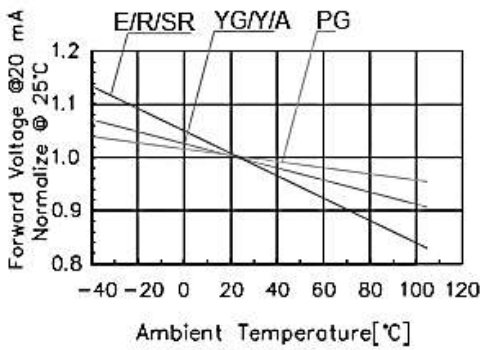


Fig 3. Forward Voltage vs. Temperature

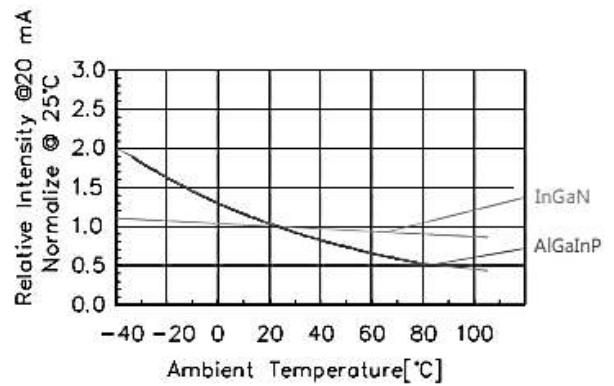


Fig 4. Relative Intensity vs. Temperature

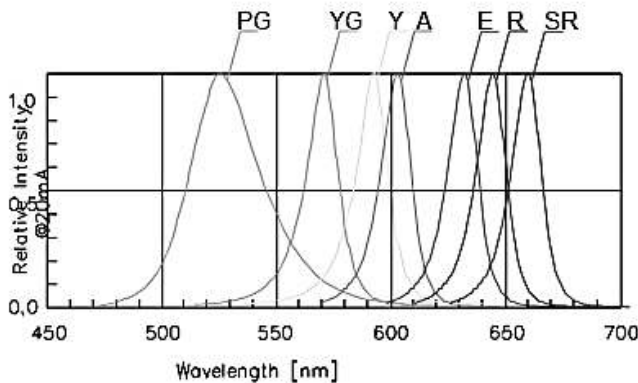


Fig 5. Relative Intensity vs. Wavelength

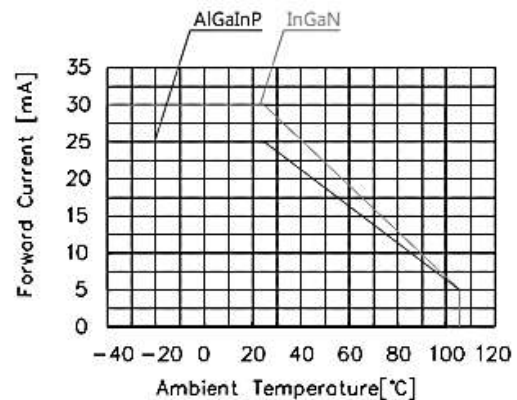


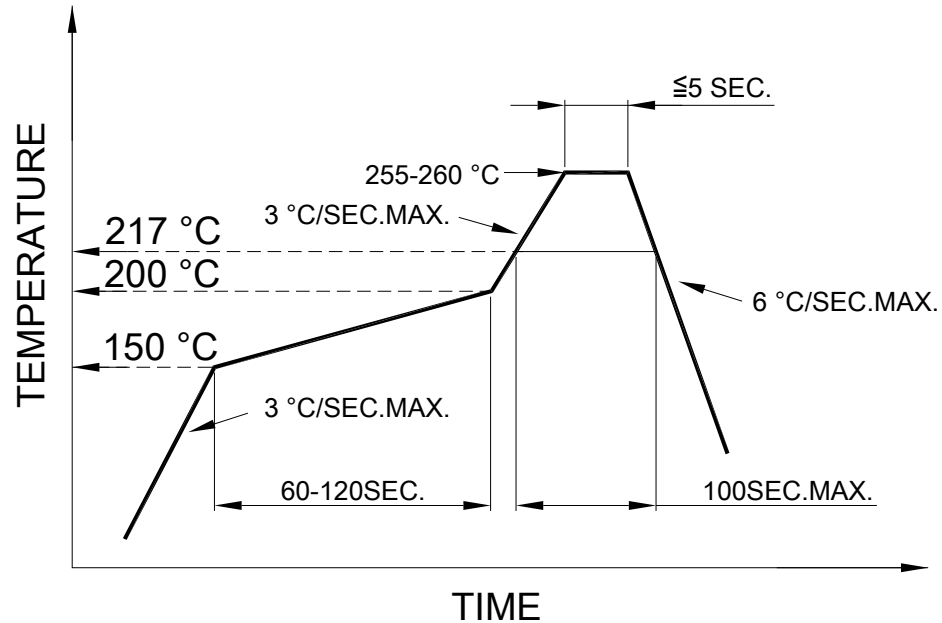
Fig 6. Forward current vs. Temperature



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**

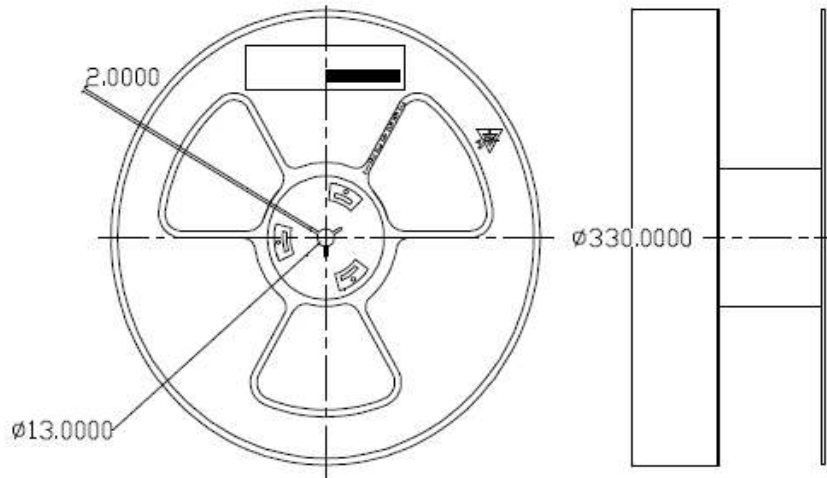
- Customer must finish rework within 3 sec. under 350°C.
- The head of soldering iron cannot touch copper foil.



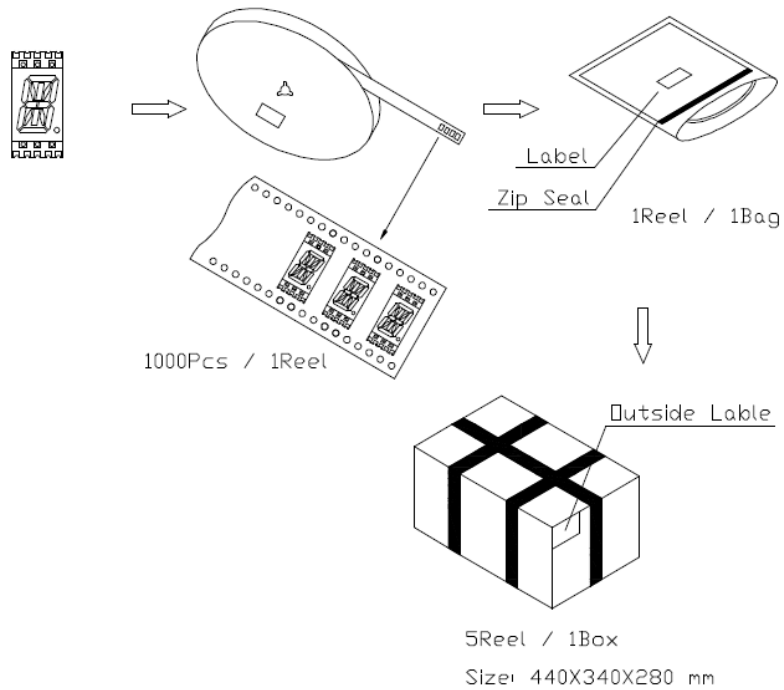
ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: [www.chromeled.com](http://www.chromeled.com)

**PACKAGING SPECIFICATION**

**REEL DIMENSION**



**Packing & Label 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](http://www.chromeled.com)