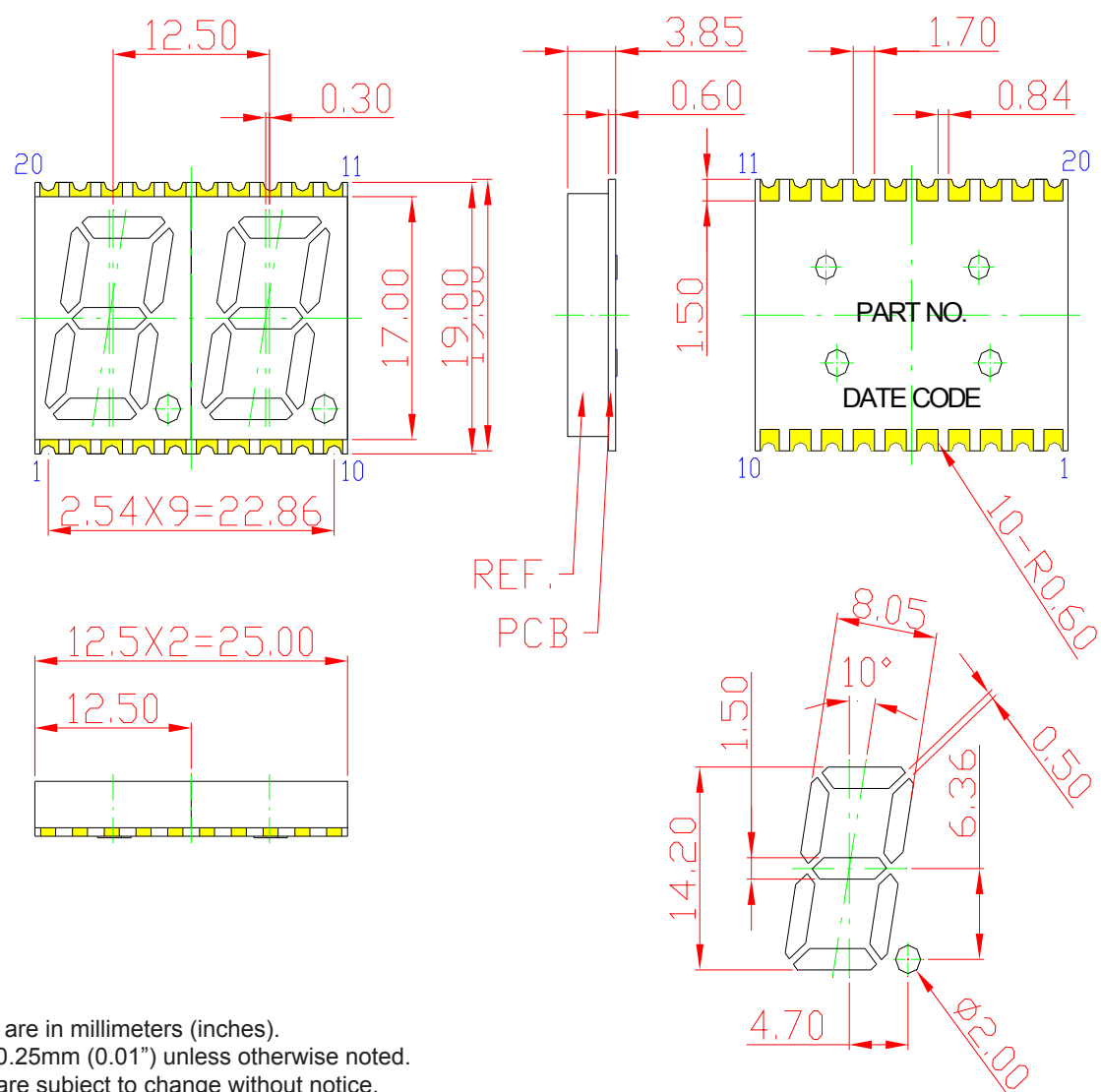


SPECIFICATIONS SDDA56R3W-1

OUTLINES DIMENSIONS



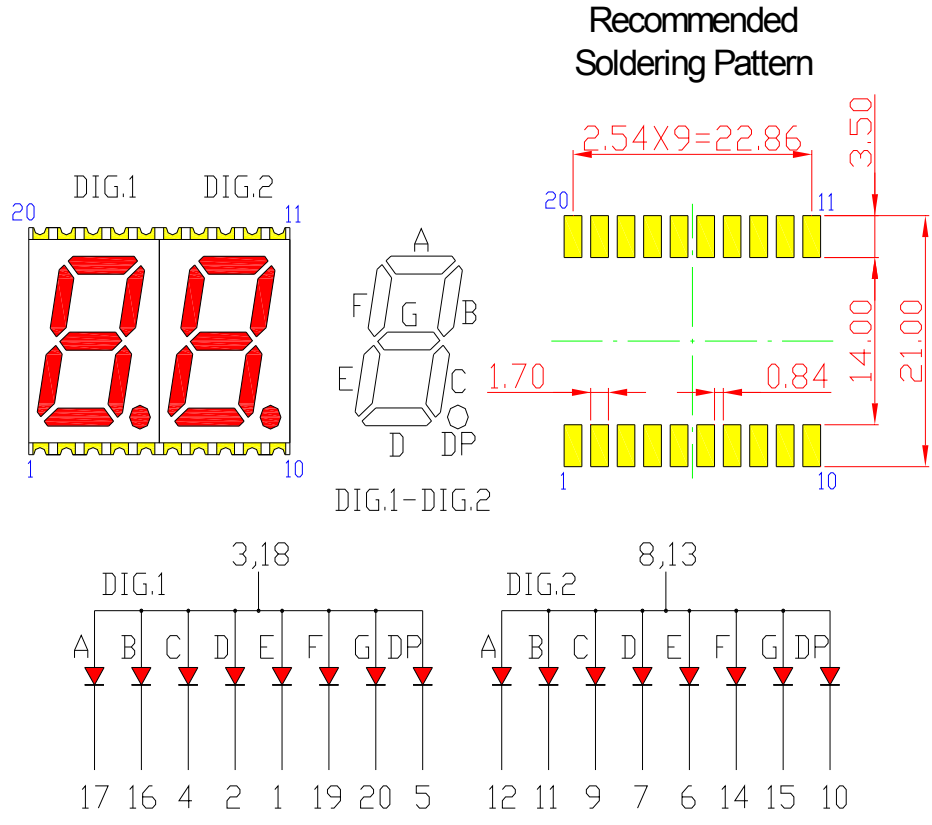
- Notes:**
1. All Dimensions are in millimeters (inches).
 2. Tolerance is $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
 3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Description
SDDA56R3W-1	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	P _D	75	mW
Pulse Forward Current	I _{FP}	100	mA
Continuous Forward Current	I _F	30	mA
Reverse Voltage Segment	V _R	5	V
Operating Temperature Range	T _{OPR}	-40~+105	°C
Storage Temperature Range	T _{STG}	-40~+105	°C
I _{FP} = 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	I _V	I _F = 20mA	-	14	-	mcd
Forward Voltage	V _F	I _F = 20mA	-	2.0	2.6	V
Reverse Leakage Current	I _R	V _R = 5V	-	-	10	μA
Dominant Wavelength	λ _d	I _F = 20mA	-	640	-	nm
Spectral Line half-width	Δλ	I _F = 20mA	-	20	-	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

Typical Electro-optical Characteristic Curves (25 °C Free Air Temperature Unless Otherwise Specified)

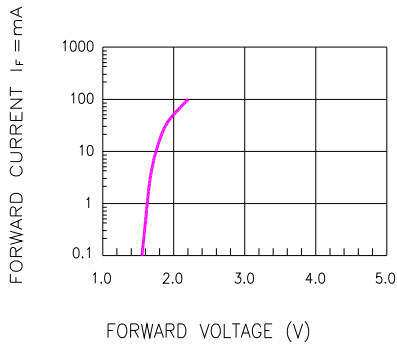


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

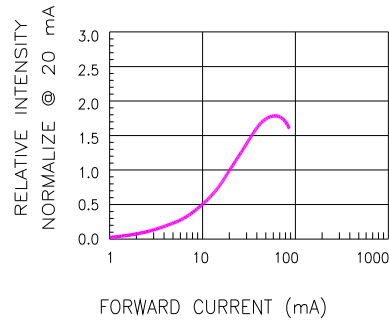


Fig.2 RELATIVE INTENSITY VS. FORWARD CURRENT

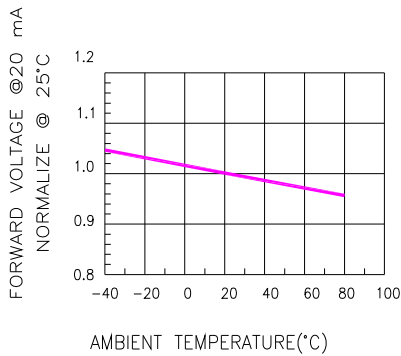


Fig.3 FORWARD VOLTAGE VS. TEMPERATURE

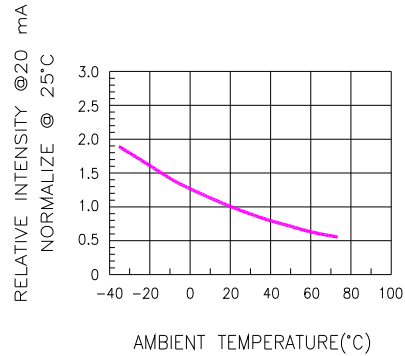


Fig.4 RELATIVE INTENSITY VS. TEMPERATURE

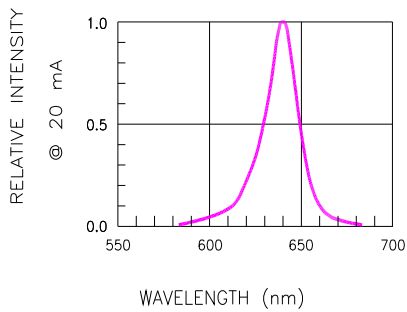


Fig.5 RELATIVE INTENSITY VS. WAVELENGTH

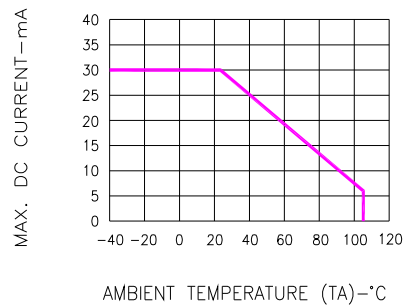


Fig.6 MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE

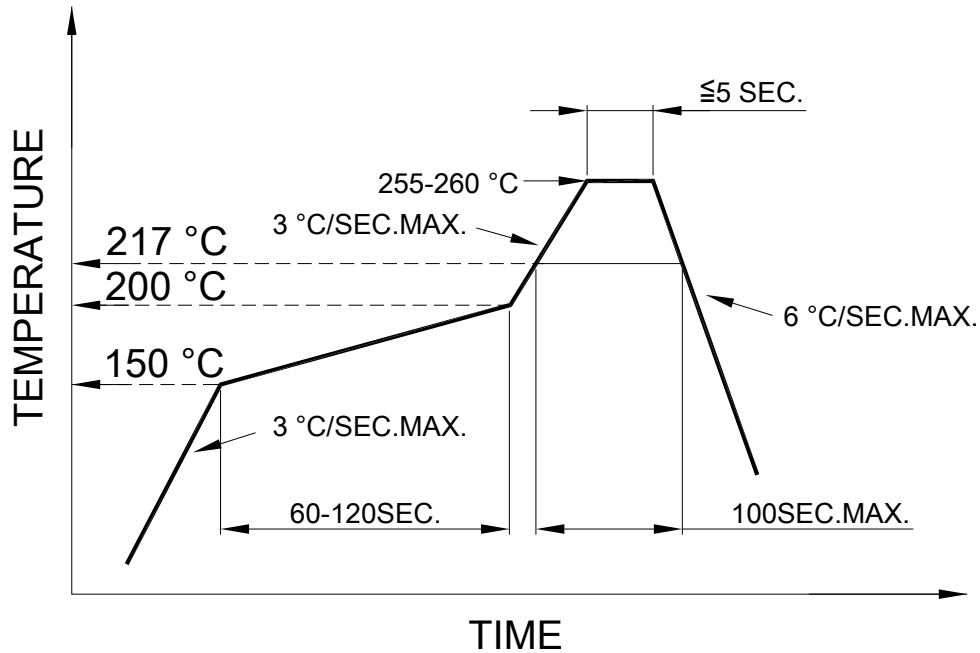


ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

SOLDERING CONDITIONS – DISPLAY TYPE LED
● RECOMMEND SOLDERING PROFILE

SMT Soldering Profile

Pb free reflow soldering Profile


● SOLDERING IRON

Basic specification : ≤ 4 seconds 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