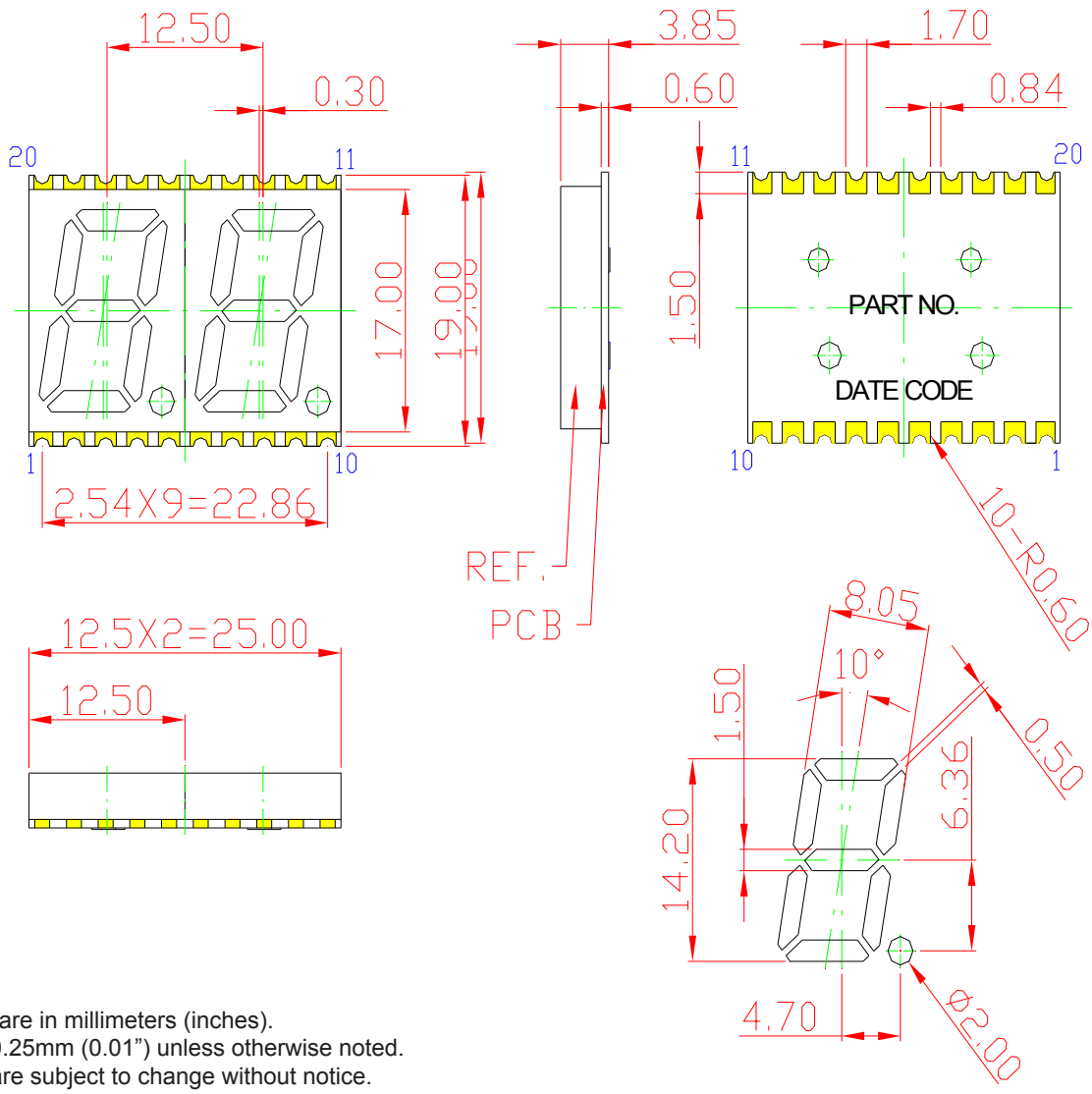
SPECIFICATIONS SDDA56R3W-1

OUTLINES DIMENSIONS



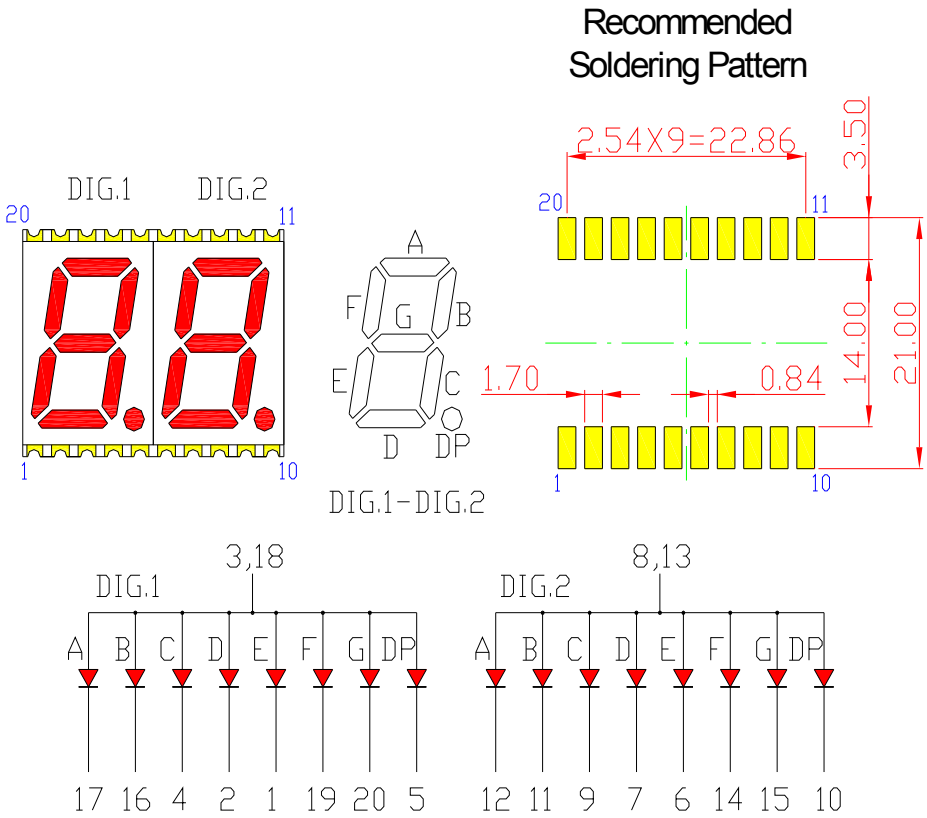
Notes:
1. All Dimensions are in millimeters (inches).
2. Tolerance is ± 0.25mm (0.01”) unless otherwise noted.
3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Description
SDDA56R3W-1	InGaAlP	Red	White Segment	Common Anode

RoHS Compliant Lead Free

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



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	λd	I_F = 20mA	-	640	-	nm
Spectral Line half-width	Δλ	I_F = 20mA	-	20	-	nm

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OPTICAL CHARACTERISTIC CURVES

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

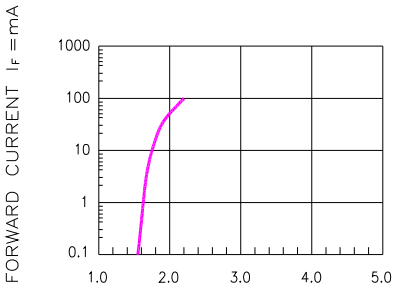


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

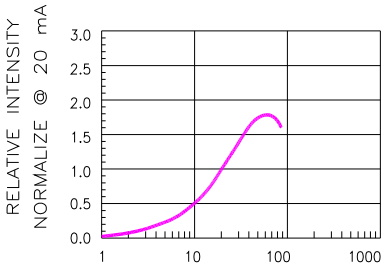


Fig.2 RELATIVE INTENSITY VS. FORWARD CURRENT

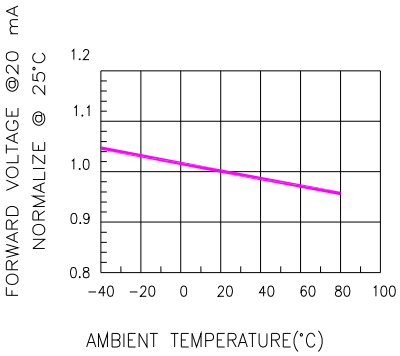


Fig.3 FORWARD VOLTAGE VS. TEMPERATURE

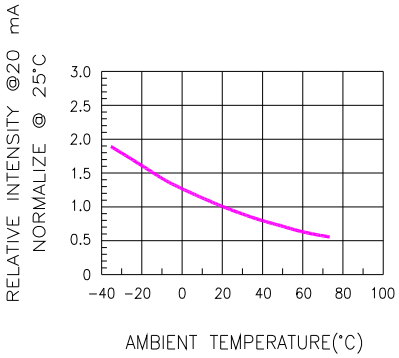


Fig.4 RELATIVE INTENSITY VS. TEMPERATURE

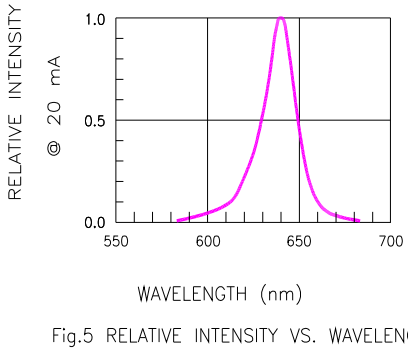


Fig.5 RELATIVE INTENSITY VS. WAVELENGTH

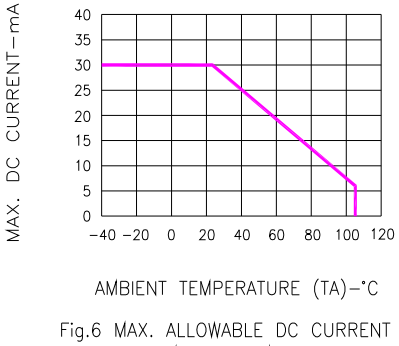


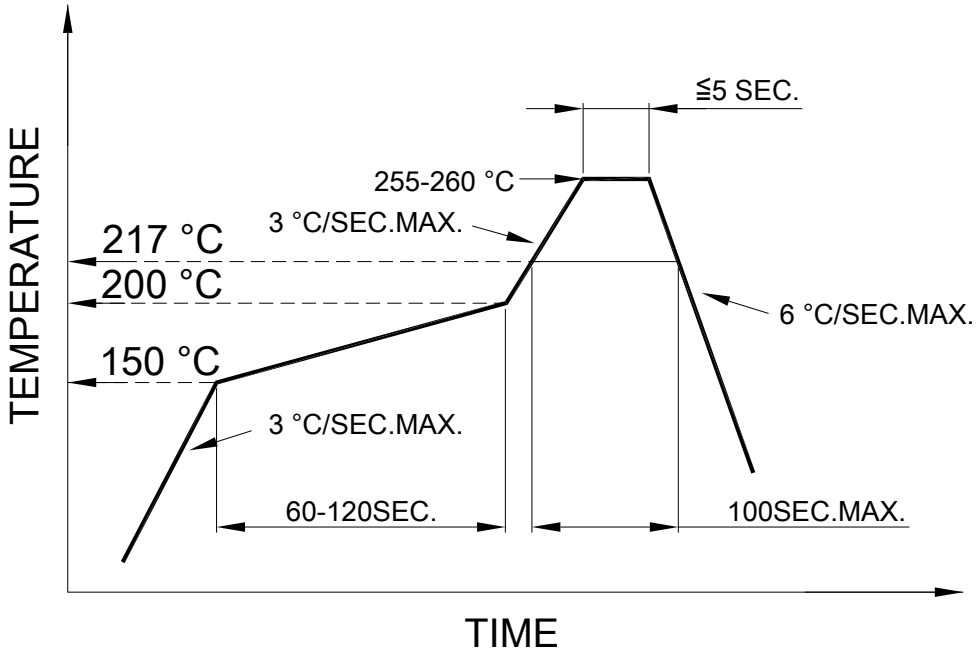
Fig.6 MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE

SOLDERING CONDITIONS – DISPLAY TYPE LED

RECOMMEND SOLDERING PROFILE

SMT Soldering Profile

Pb free reflow soldering Profile



SOLDERING IRON

Basic specification : ≦4 seconds when 260℃, If temperature is higher, time should be shorter (+10℃→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℃.

REWORK

Customer must finish rework within 3 sec. under 350℃.

The head of soldering iron cannot touch copper foil.