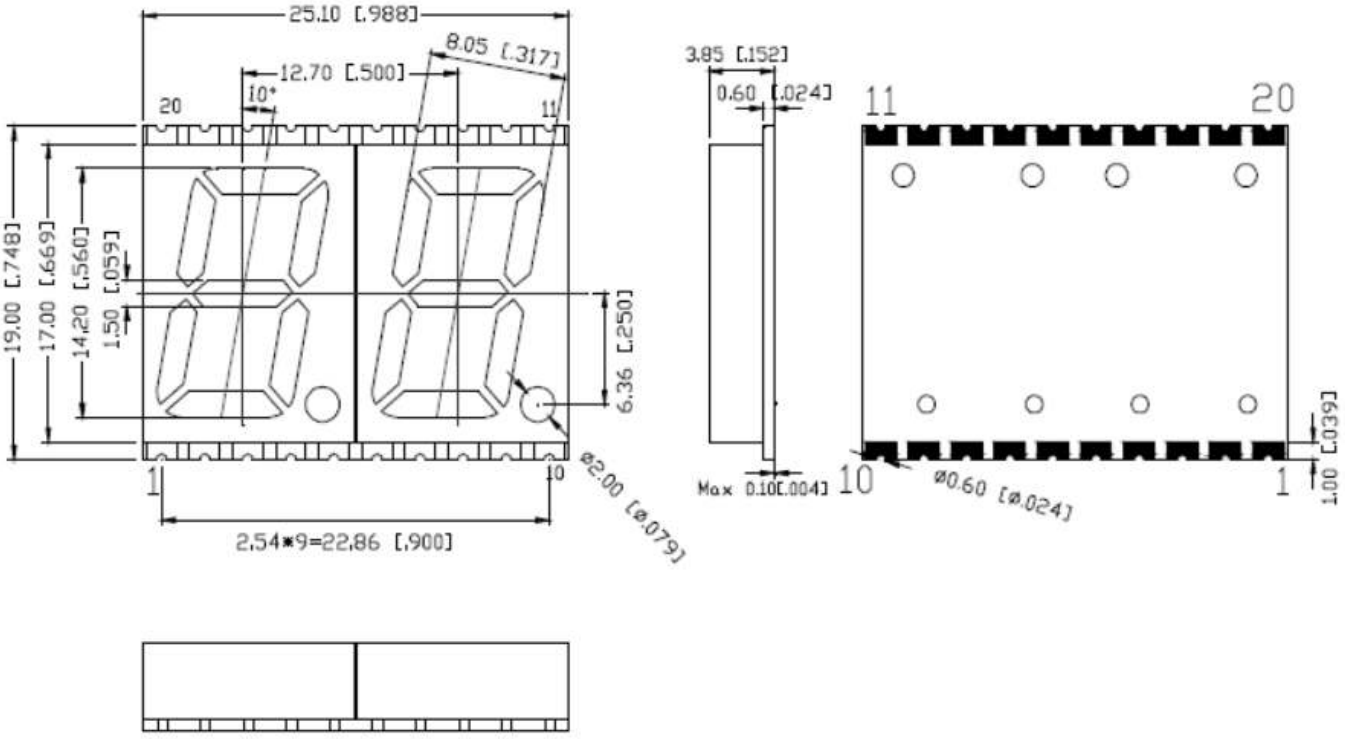
SPECIFICATIONS SDDC56W2W

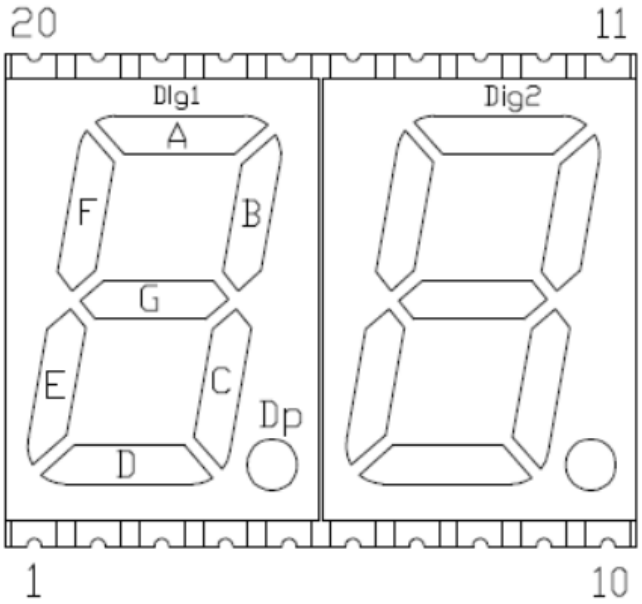
OUTLINES DIMENSIONS

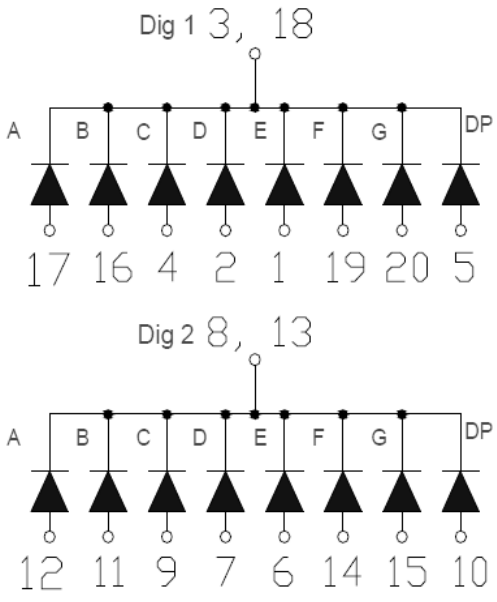


Notes:
1. All Dimensions are in millimeters (inches).
2. Tolerance is ± 0.25mm (0.01”) unless otherwise noted.
3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Description
SDDC56W2W	InGaN	White	White Segment	Common Cathode

TYPICAL INTERNAL EQUIVALENT CIRCUIT





Common Cathode

ABSOLUTE MAXIMUM RATINGS (TA=25°C)

Parameter	Symbol	Max Rating	Unit
Power Dissipation	P_D	114	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	Iv	I_F = 10mA	-	60	-	mcd
Forward Voltage	V_F	I_F = 20mA	-	3.2	3.8	V
Reverse Leakage Current	I_R	V_R = 5V	-	-	10	μA
Chromaticity Coordinates	X	I_F = 20mA	-	0.27	-	-
	Y	I_F = 20mA	-	0.25	-	-

RoHS Compliant Lead Free

OPTICAL CHARACTERISTIC CURVES

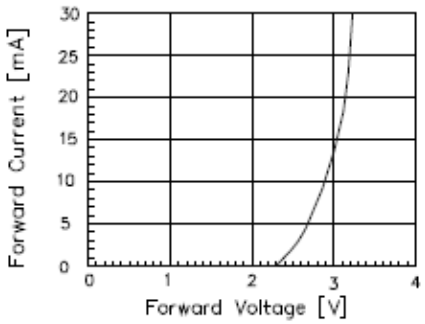


Fig 1. Forward Current vs. Forward Voltage

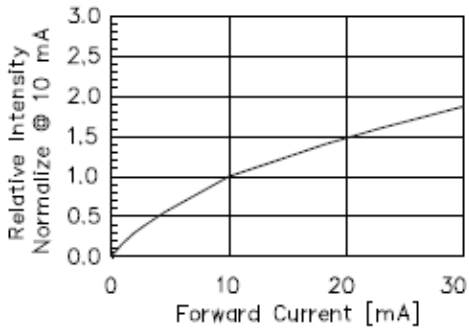


Fig 2. Relative Intensity vs. Forward Current

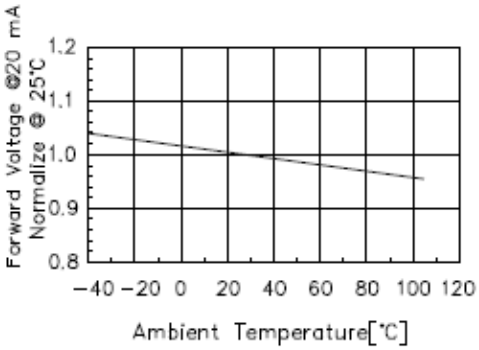


Fig 3. Forward Voltage vs. Temperature

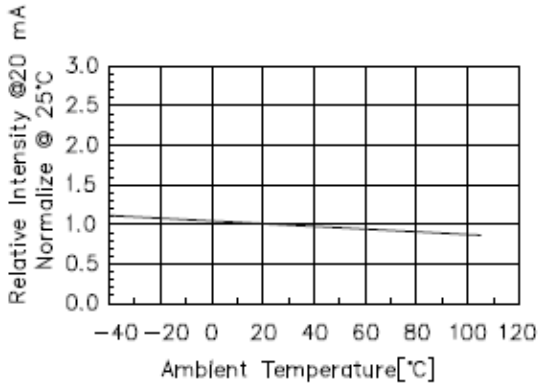


Fig 4. Relative Intensity vs. Temperature

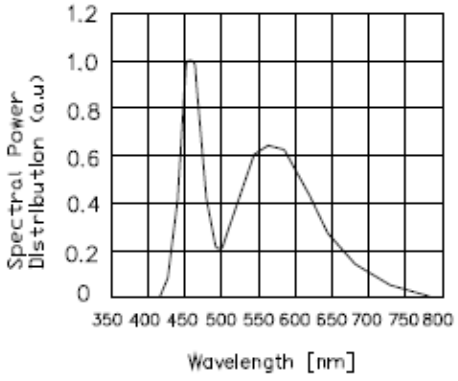


Fig 5. Spectral Power Distribution vs. Wavelength

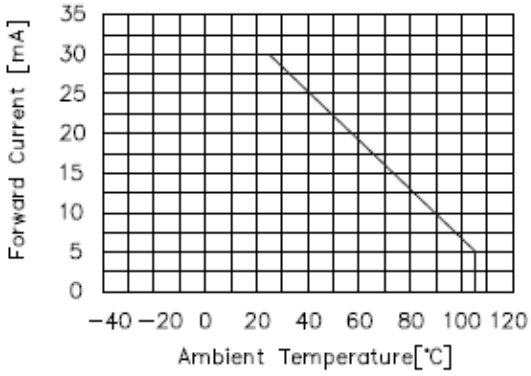


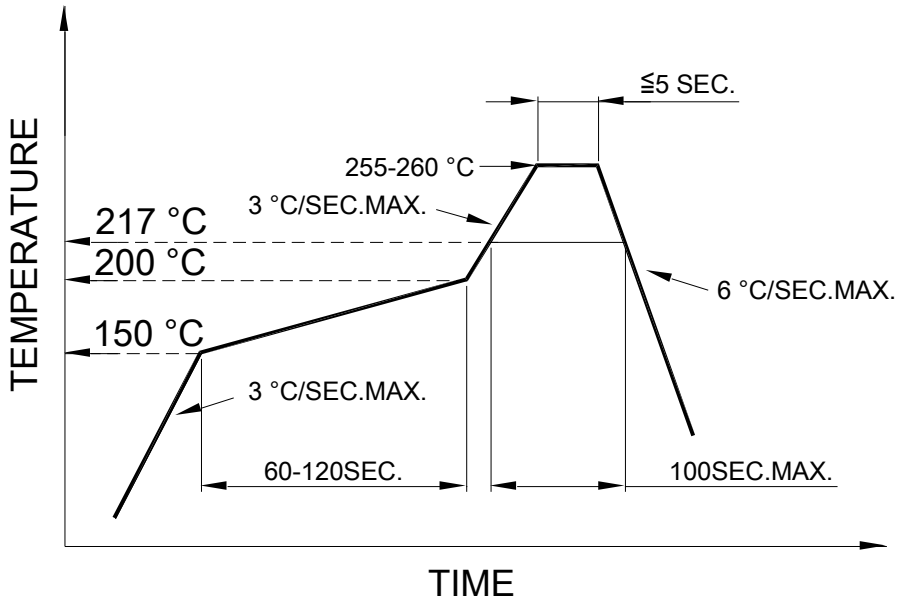
Fig 6. Forward current vs. Temperature

SOLDERING CONDITIONS – DISPLAY TYPE LED

SMT REFLOW SOLDERING INSTRUCTIONS

SMT Soldering Profile

Pb free reflow soldering Profile



- We recommend the reflow temperature 245°C (+/- 5°C).
  The maximum soldering temperature should be limited to 260°C.
- Number of reflow process shall be 2 times or less.

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℃.
- The head of soldering iron cannot touch copper foil.