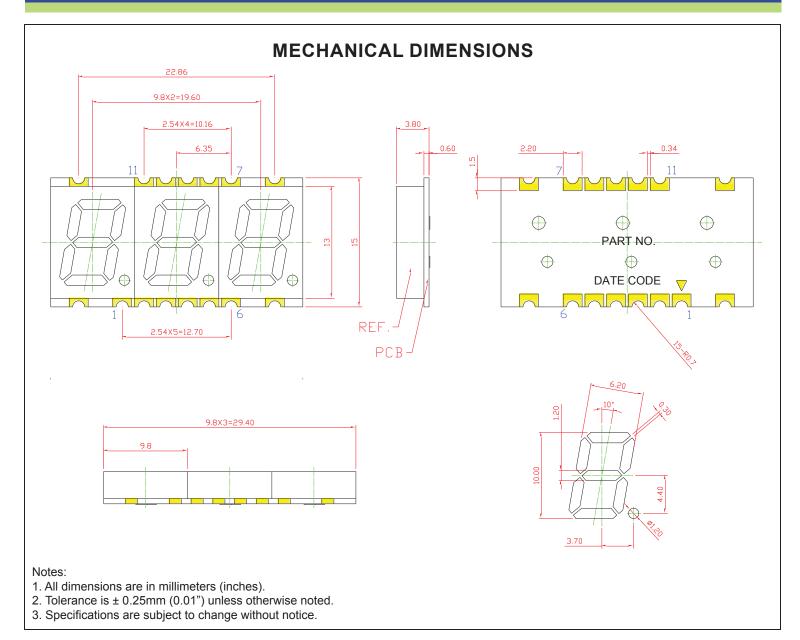


# SPECIFICATIONS SDTC39W2W

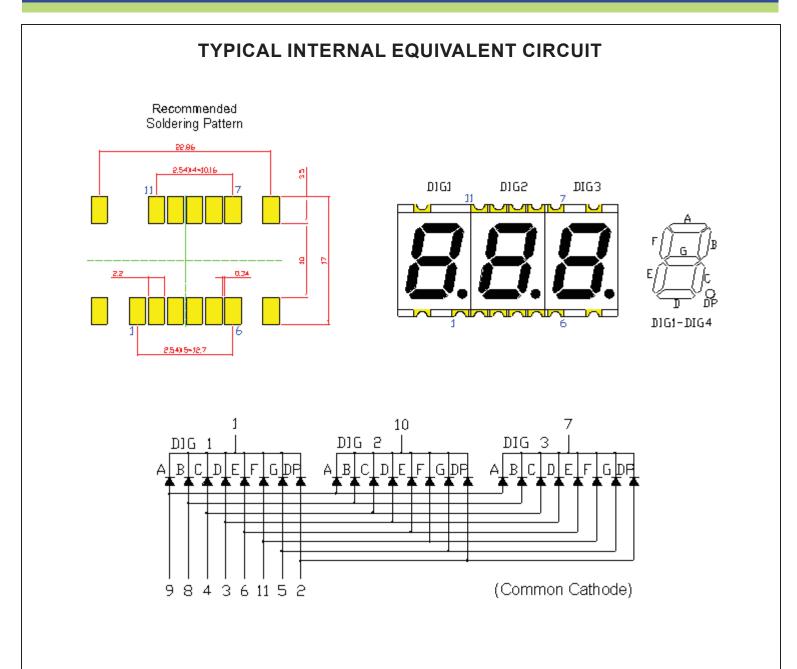


Part Number	Chip Material	Color of Emission	Lens Type	Description	
SDTC39W2W	InGaN	White	White Segment	Common Cathode	





### **SPECIFICATIONS**



#### Notes:

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



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		Unit
Power Dissipation per Dice	PAD	120	mW
Derating Liner from 25°C per Dice	-	0.3	mA / °C
Continuous Forward Current per Dice	laf	30	mA
Peak Current per Dice (duty cycle 1/10, 1kHz)	lpf	100	mA
Reverse Voltage per Dice	VR	5	°C
Operating Temperature	Topr	-40~+105	°C
Storage Temperature	Тѕтс	-40~+105	°C

# **OPTICAL-ELECTRICAL CHARACTERISTICS**

(TA=25°C)

Characteristic	Symbol	Condition	Value			Linit
Characteristic			Min.	Type.	Max.	Unit
Forward Voltage per Dice	VF	IF =5mA	-	3.2	4.0	V
Reverse Current per Dice	lR	VR = 8V	-	-	10	μΑ
Chromaticity Coordinate	Х	IF =5mA	-	0.29	-	nm
Chromaticity Coordinate	Υ	IF =5mA	-	0.29	-	nm
Luminous Intensity	lv	IF =5mA	-	25	-	mcd
Spectral Radiation Bandwidth per Dice	Δλ	IF =5mA	-	30	-	nm

<sup>\*</sup>Tolerance of viewing angle: -10 / +5 deg.



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**

### (25 °C Free Air Temperature Unless Otherwise Specified)

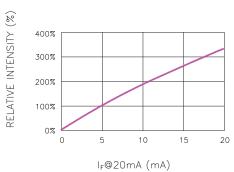
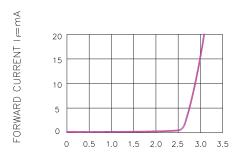
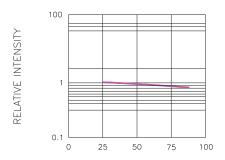


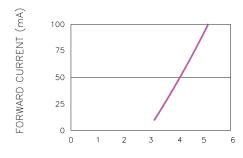
Fig.1 RELATIVE INTENSITY VS. FORWARD CURRENT



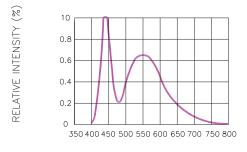
FORWARD VOLTAGE (V)
Fig.2 FORWARD CURRENT VS. FORWARD VOLTAG



LEAD TEMPERATURE(\*C)
Fig.3 RELATIVE INTENSITY VS.LEAD TEMPERATURE
(PULSED 20 mA; 300us
PULSE,10ms PERIOD)



FORWARD VOLTAGE(V)
Fig.4 PEAK FORWARD VOLTAGE
VS.FORWARD(100us TEST PULSE,
1% DUTY CYCLE)



WAVELENGTH (nm)
Fig.4 RELATIVE INTENSITY VS. WAVELENGTH



AMBIENT TEMPERATURE (TA)-°C
Fig.7 MAX. ALLOWABLE DC CURRENT
VS. AMBIENT TEMPERATURE



DC CURRENT-mA

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

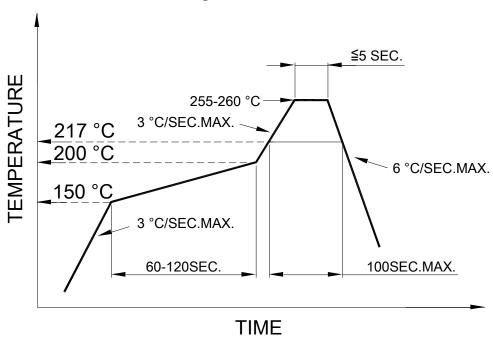


#### **SOLDERING CONDITIONS - SMD TYPE LED**

#### 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.

