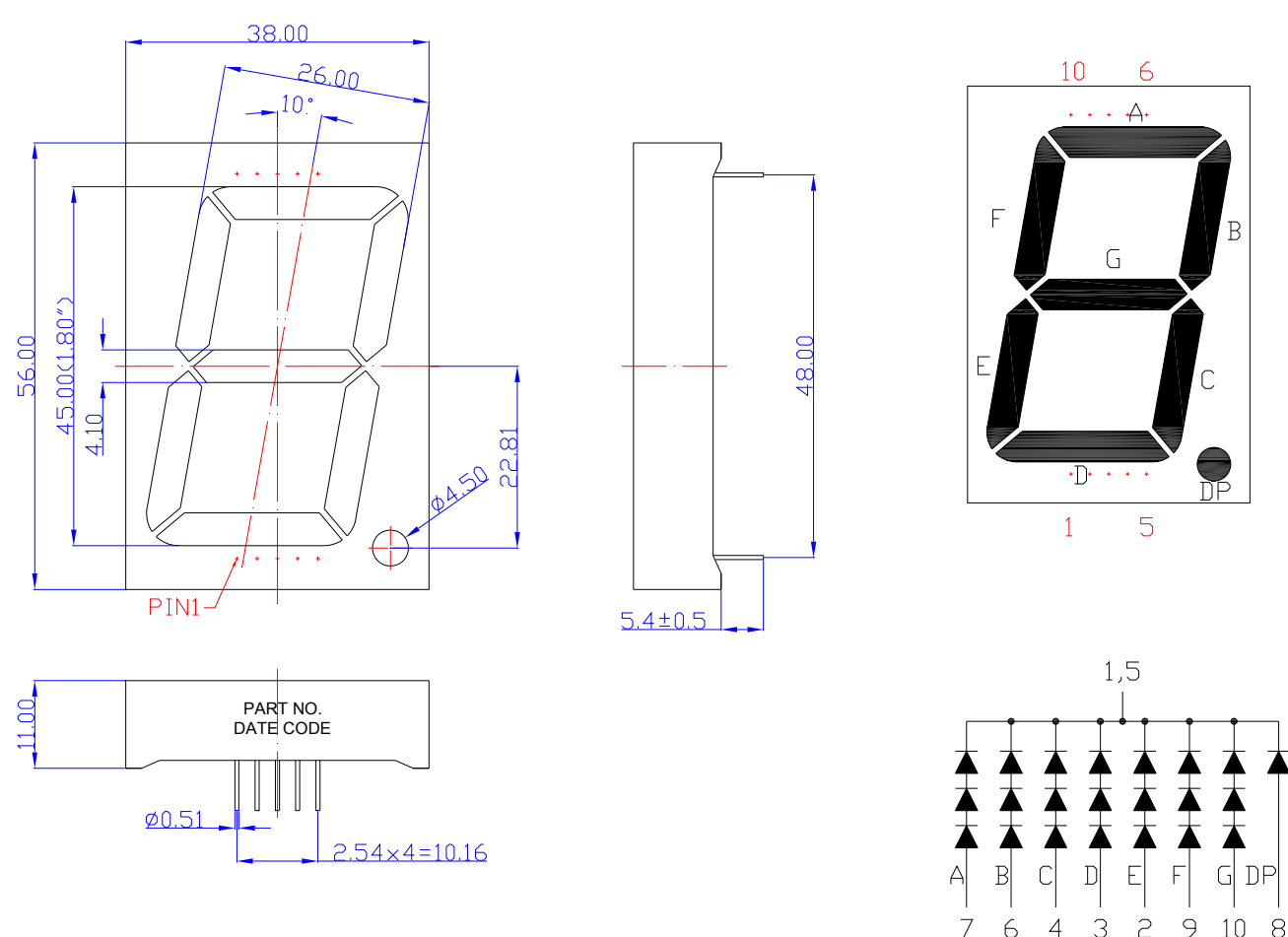


SPECIFICATIONS **CDSC18W2W**

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
CDSC18W2W	InGaN	White	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

ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

Parameter	Symbol	Max Rating	Unit
Power Dissipation	PD	78	mW
Pulse Forward Current	IFP	60	mA
Continuous Forward Current	IF	20	mA
Reverse Voltage Segment	VR	5	V
Operating Temperature Range	TOPR	-25~+85	°C
Storage Temperature Range	TSTG	-25~+85	°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 per segment	Iv	IF = 5mA	-	180	-	mcd
Forward Voltage per segment	VF	IF = 5mA	-	8.7	-	V
Reverse Leakage Current	IR	VR = 5V	-	-	10	µA
Chromaticity Coordinates	X	IF = 5mA	-	0.285	-	-
Chromaticity Coordinates	λD	IF = 5mA	-	0.275	-	-
Spectral Radiation Bandwidth	Δλ	IF = 5mA	-	30	-	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

(25 °C Free Air Temperature Unless Otherwise Specified)

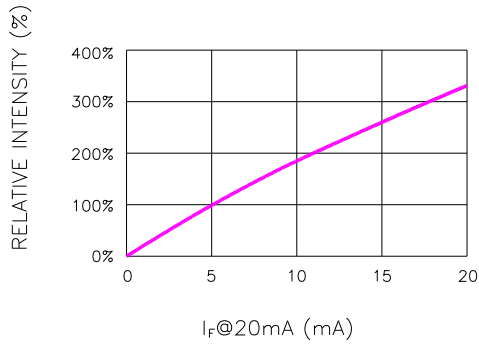


Fig.1 RELATIVE INTENSITY VS. FORWARD CURRENT

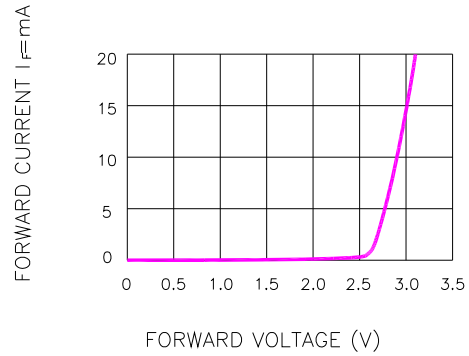


Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE

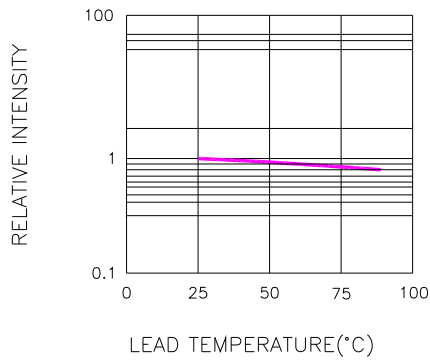


Fig.3 RELATIVE INTENSITY VS. LEAD TEMPERATURE
(PULSED 20 mA; 300us PULSE, 10ms PERIOD)

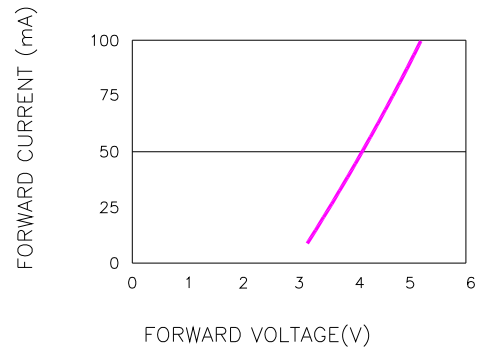


Fig.4 PEAK FORWARD VOLTAGE VS. FORWARD (100us TEST PULSE, 1% DUTY CYCLE)

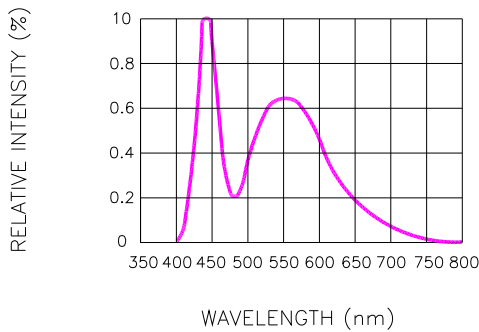


Fig.4 RELATIVE INTENSITY VS. WAVELENGTH

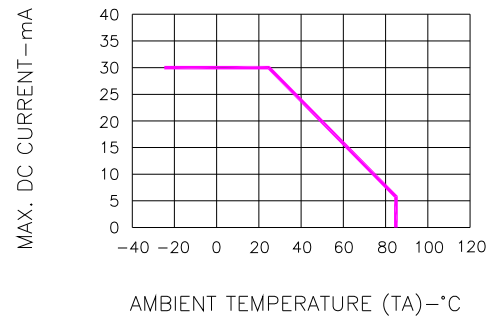


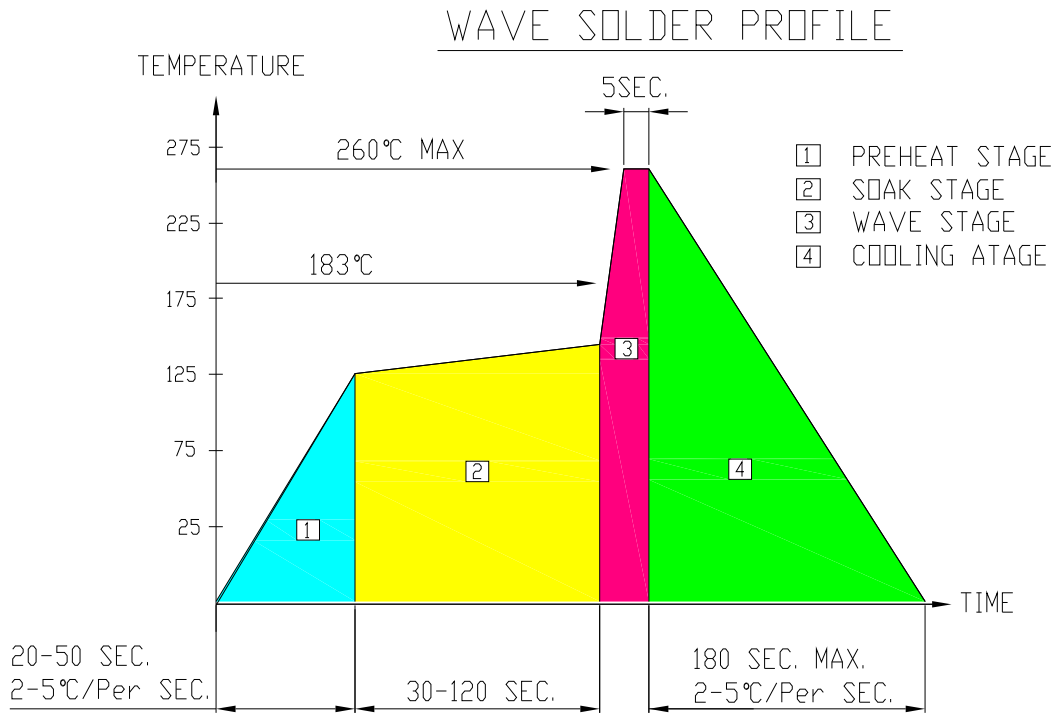
Fig.7 MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE



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



● Note:

- Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C
- Peak wave soldering temperature between 245°C ~ 225°C for 3 sec (5 sec max)
- No more than one wave soldering pass

● 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°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