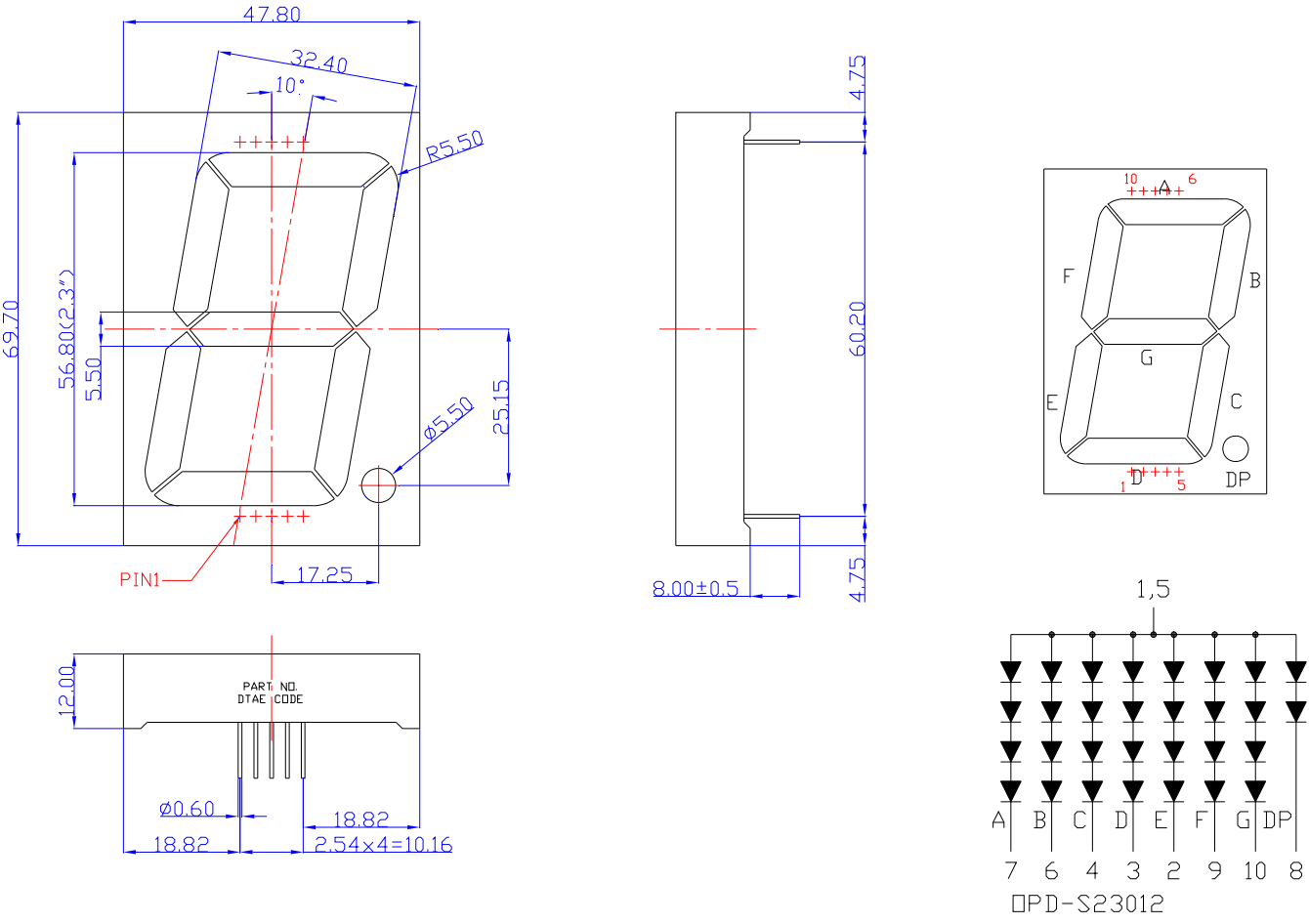


SPECIFICATIONS **CDSA23W2W**
OUTLINES DIMENSIONS


- 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
CDSA23W2W	InGaN	White	White Segment	Common Anode



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

Parameter	Symbol	Max Rating	Unit
Power Dissipation	P_D	78	mW
Pulse Forward Current	I_{FP}	80	mA
Continuous Forward Current	I_F	20	mA
Reverse Voltage Segment	V_R	5	V
Operating Temperature Range	T_{OPR}	-30~+80	°C
Storage Temperature Range	T_{STG}	-40~+85	°C
I_{FP} = Pulse Width \leq 10 ms, Duty Ratio \leq 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	$I_F = 20\text{mA}$	112	160	-	mcd
Forward Voltage	V_F	$I_F = 20\text{mA}$	-	11.6	-	V
Reverse Leakage Current	I_R	$V_R = 20\text{V}$	-	-	10	μA
Chromaticity Coordinates	X	$I_F = 5\text{mA}$	-	0.29	-	-
Chromaticity Coordinates	λ_D	$I_F = 5\text{mA}$	-	0.28	-	-
Spectral Radiation Bandwidth	$\Delta\lambda$	$I_F = 5\text{mA}$	-	30	-	nm



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OPTICAL CHARACTERISTIC CURVES

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

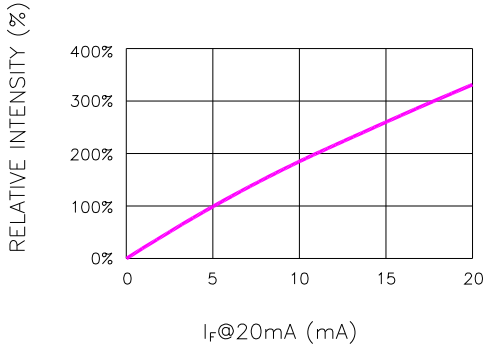


Fig.1 RELATIVE INTENSITY VS. FORWARD CURRENT

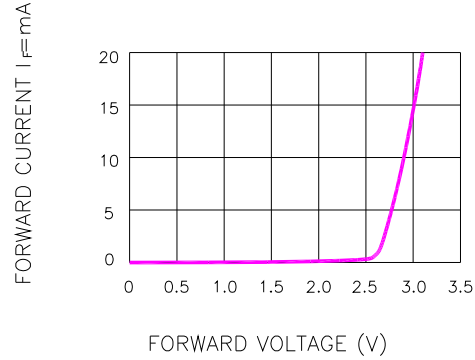


Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE

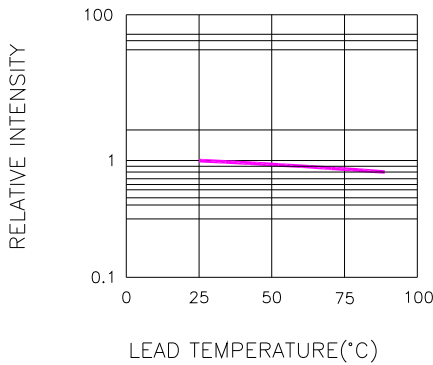


Fig.3 RELATIVE INTENSITY VS. LEAD TEMPERATURE
(PULSED 20 mA; 300us PULSE, 10ms PERIOD)

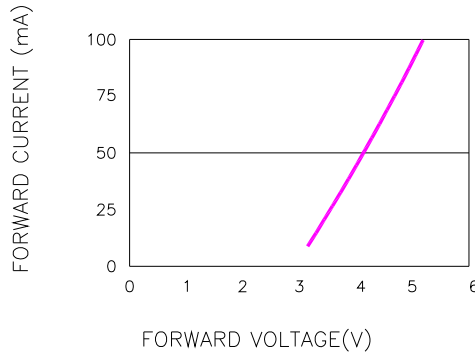


Fig.4 PEAK FORWARD VOLTAGE VS. FORWARD
(100us TEST PULSE, 1% DUTY CYCLE)

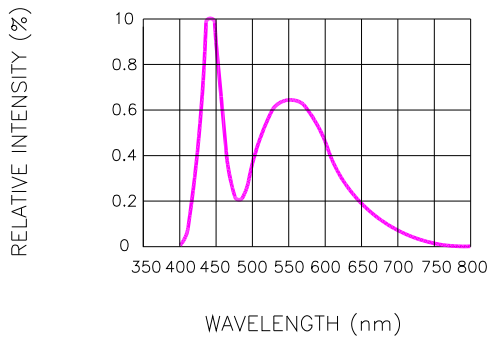


Fig.4 RELATIVE INTENSITY VS. WAVELENGTH

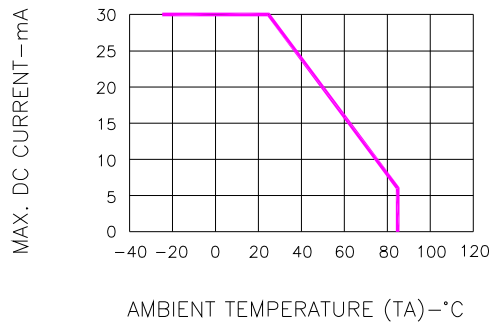


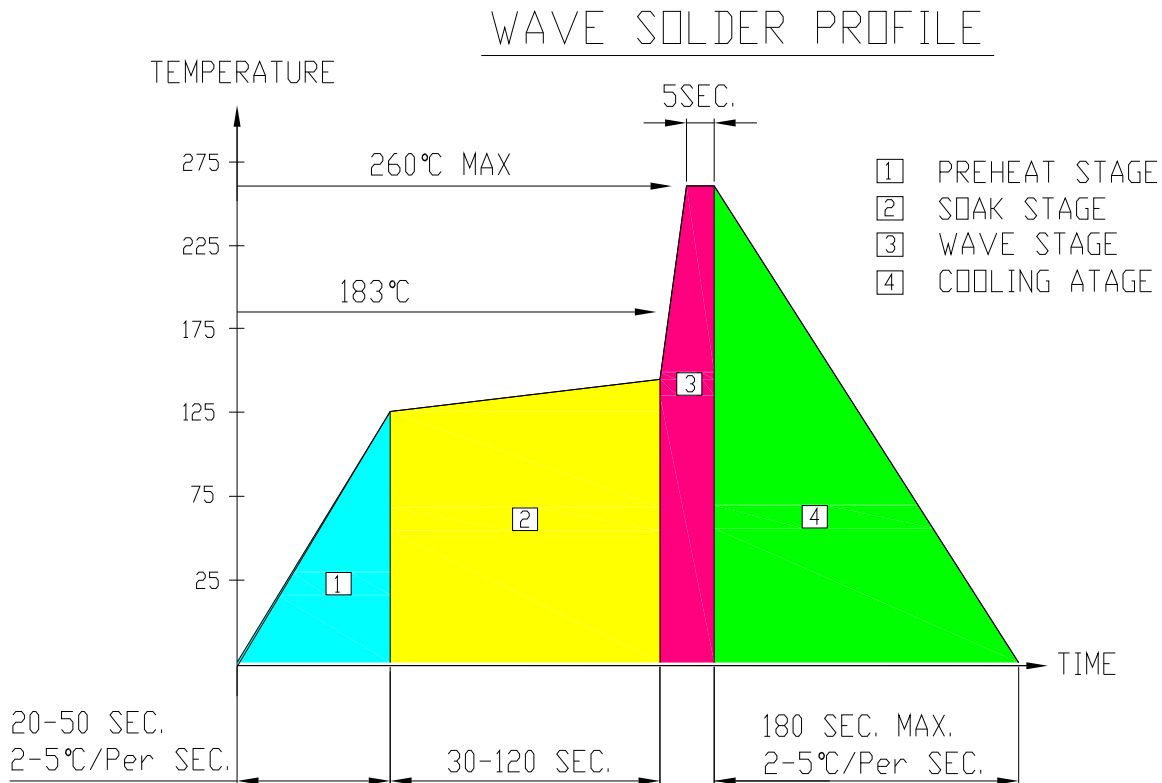
Fig.7 MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE



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SOLDERING CONDITIONS – DISPLAY TYPE LED

● RECOMMEND SOLDERING PROFILE



● 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 ≤ 4 sec under 245°C.



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