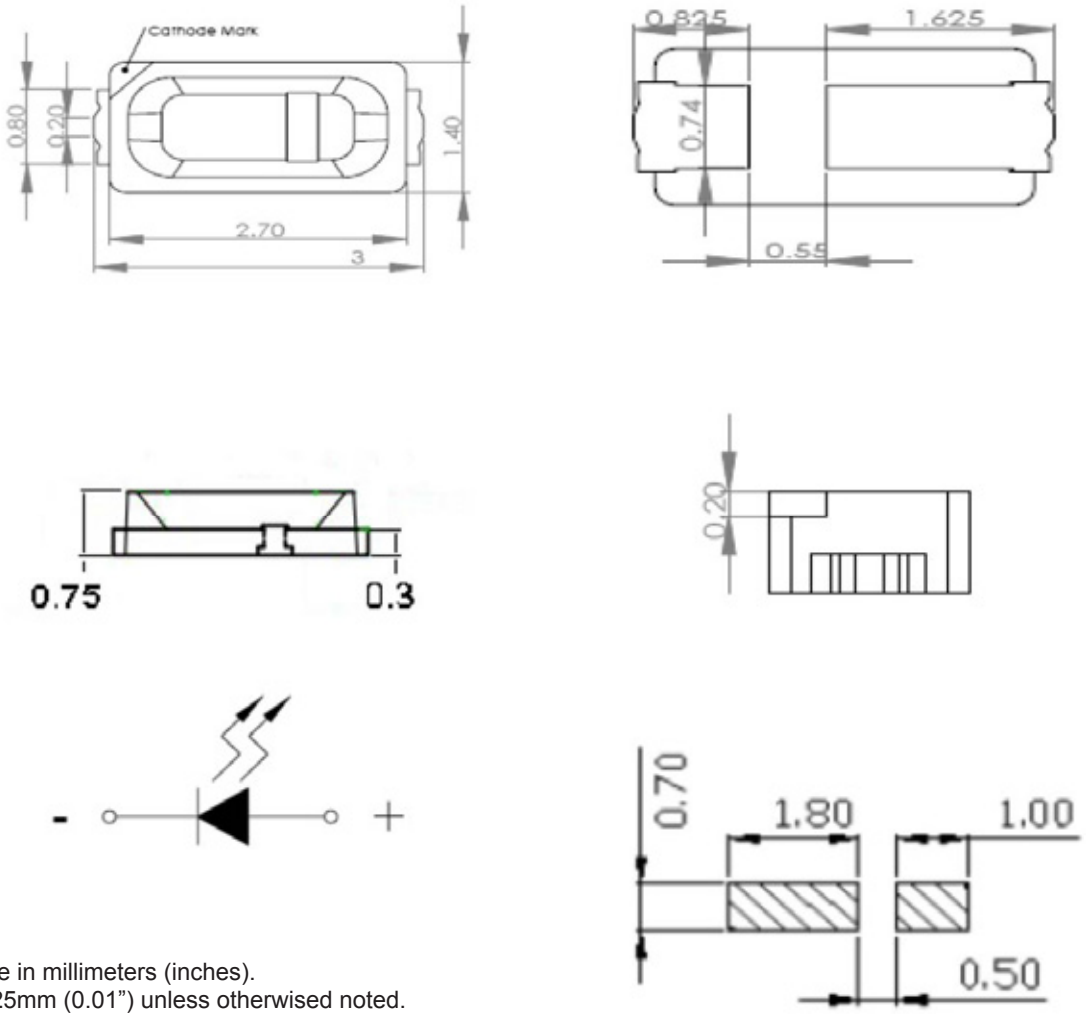


**SPECIFICATION** **CSP125CW5C**
**PACKAGE OUTLINES**


- 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	Viewing Angle
CSP125CW5C	InGaN	White	Yellow Diffused	120°



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**ABSOLUTE MAXIMUM RATINGS**
**(TA=25°C)**

Parameter	Symbol	Max Rating	Unit
Forward Current	IF	60	mA
Reverse Current @ 5V	IR	10	μA
Operating Temperature Range	TOP	-40~+80	°C
Storage Temperature Range	TSTG	-40~+100	°C
Peak Pulsing Current (1/8 duty f = 10KHz)	IFP	125	mA
Soldering Temperature	TSOL	Max 260°C for 10 sec Max	

**OPTICAL-ELECTRICAL CHARACTERISTICS**
**(TA=25°C)**

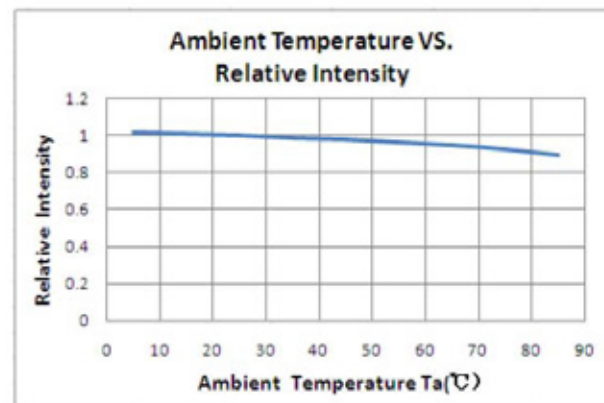
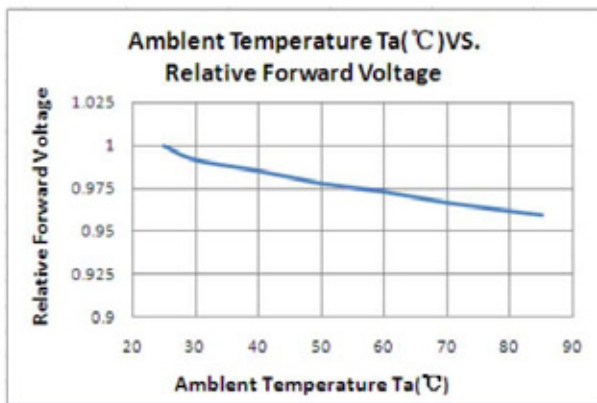
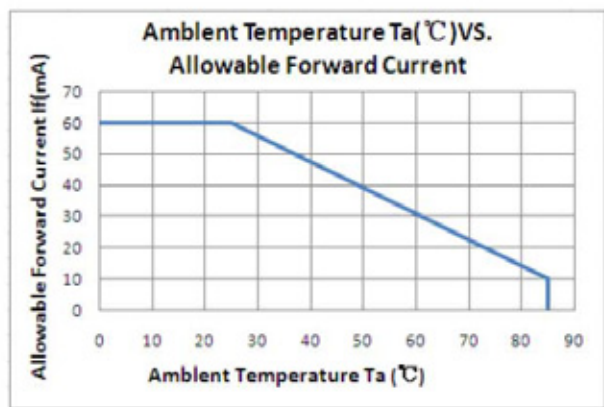
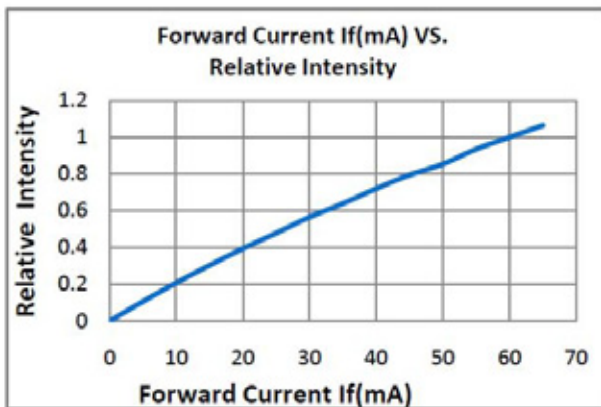
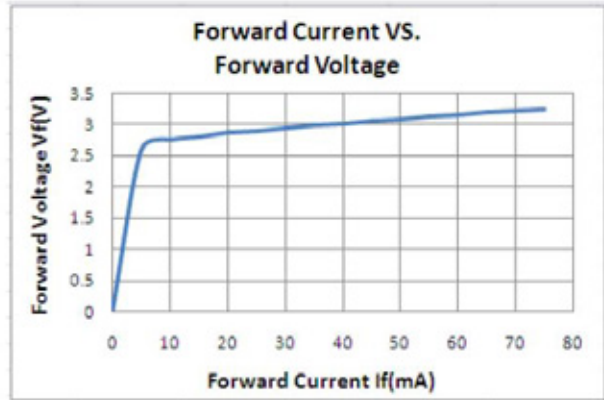
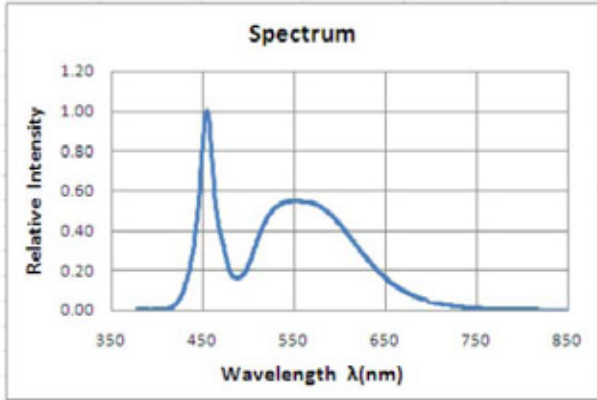
Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	Iv	IF = 60mA	6070	7800	-	Mcd
Forward Voltage	VF	IF = 60mA	-	3.1	3.4	V
Reverse Leakage Current	IR	VR = 5V	-	-	10	μA
Viewing Angle at 50% Iv	2θ1/2	IF = 60mA	-	120	-	Deg
CIE Coordinates	X	IF = 60mA	0.32	-	0.33	-
	Y		0.29	-	0.30	-
Correlated Color Temperature	CCT	IF = 60mA	5500	-	7500	K

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



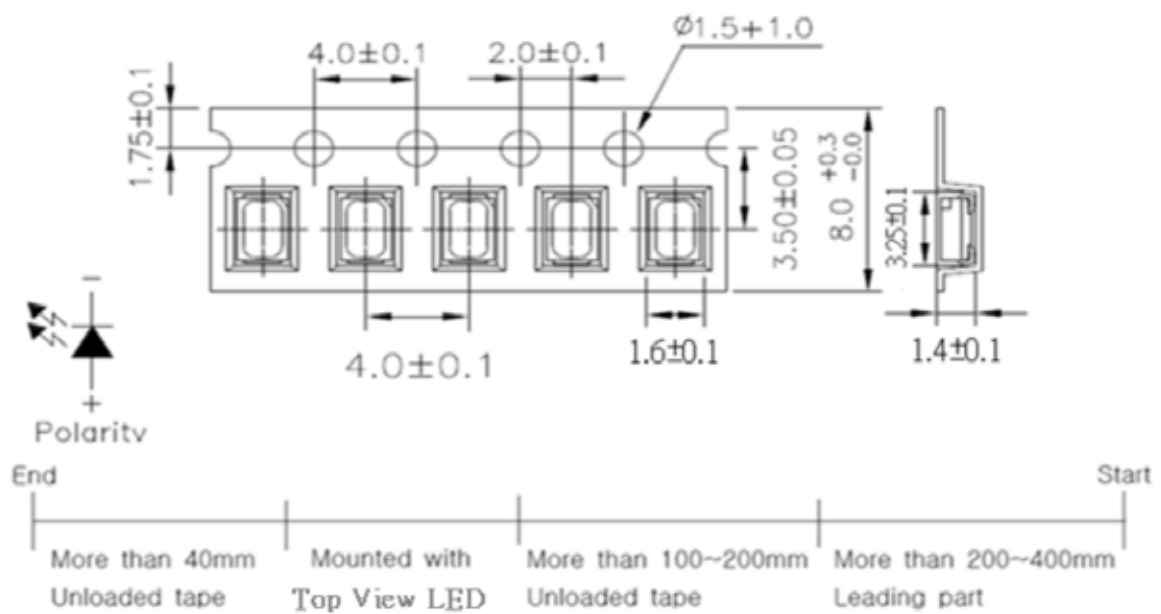
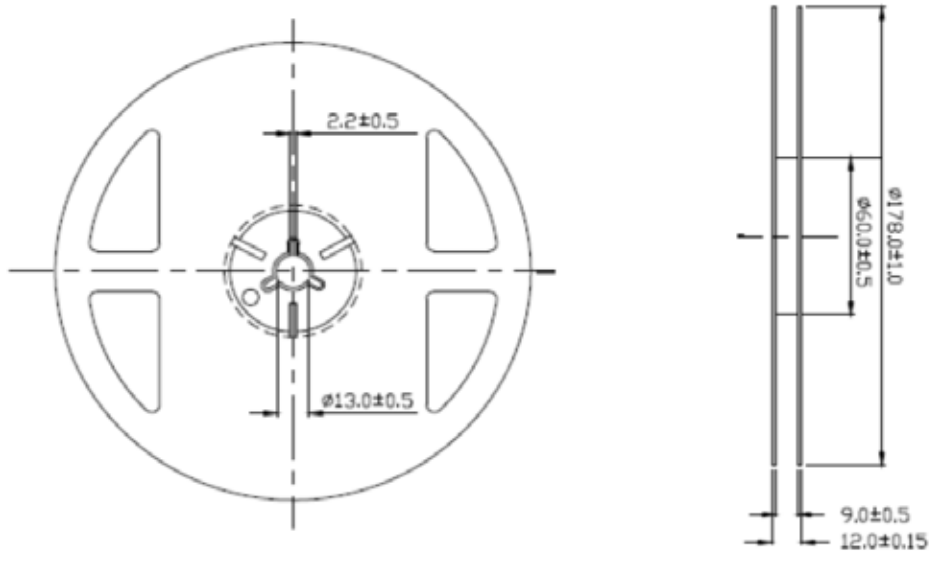
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## OPTICAL CHARACTERISTIC CURVES



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## PACKAGING SPECIFICATION



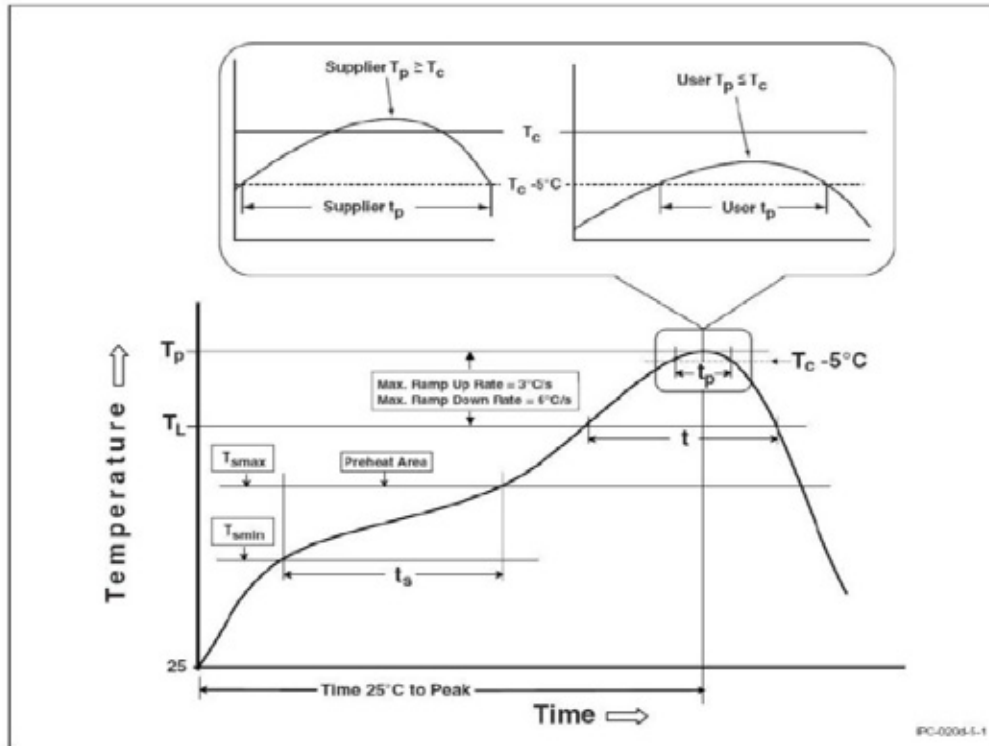
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## SOLDERING CONDITIONS

Profile Feature	Sn-Pb Eutectic Assembly	Pb-Free Assembly
Preheat & Soak		
Temperature min (T <sub>smin</sub> )	100 °C	150 °C
Temperature max (T <sub>smax</sub> )	150 °C	200 °C
Time (T <sub>smin</sub> to T <sub>smax</sub> ) (t <sub>s</sub> )	60-120 seconds	60-120 seconds
Average ramp-up rate (T <sub>smax</sub> to T <sub>p</sub> )	3 °C/second max	3 °C/second max
Liquidous temperature (T <sub>L</sub> )	183 °C	217 °C
Time at liquidous (t <sub>L</sub> )	60-150 seconds	60-150 seconds
Peak package body temperature (T <sub>p</sub> )*	230 °C ~235 °C	255 °C ~260 °C
Classification temperature (T <sub>c</sub> )	235 °C	260 °C
Time (t <sub>p</sub> ) within 5 °C of the specified classification temperature (T <sub>c</sub> )	20 seconds	30 seconds
Average ramp-down rate (T <sub>p</sub> to T <sub>smax</sub> )	6 °C/second max	6 °C/second max
Time 25 °C to peak temperature	6 minutes max	8 minutes max

\* Tolerance for peak profile temperature (T<sub>p</sub>) is defined as a supplier minimum and a user maximum.

\*\* Tolerance for time at peak profile temperature (t<sub>p</sub>) is defined as a supplier minimum and a user maximum



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