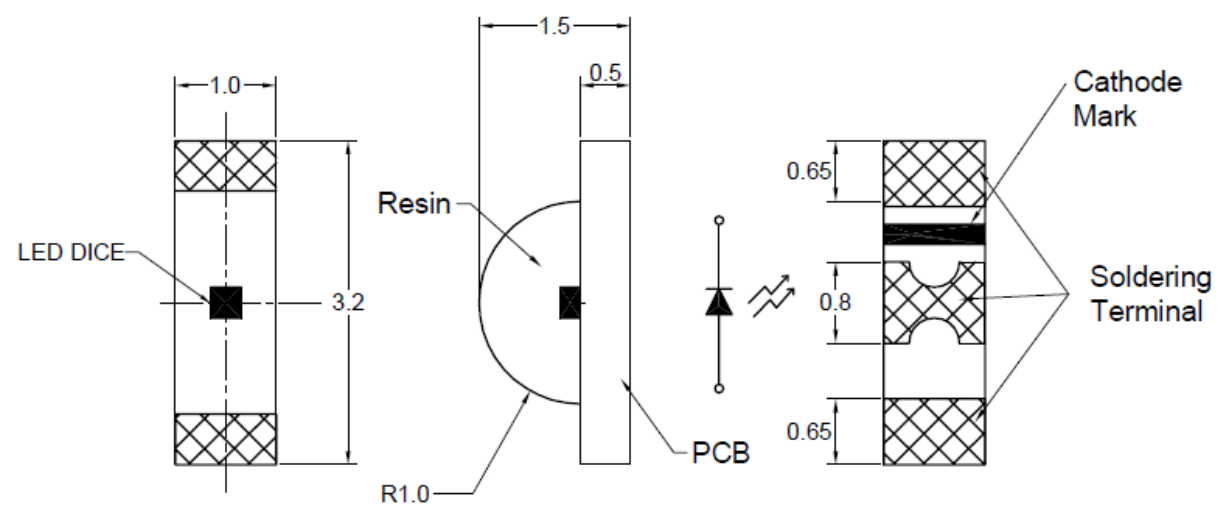
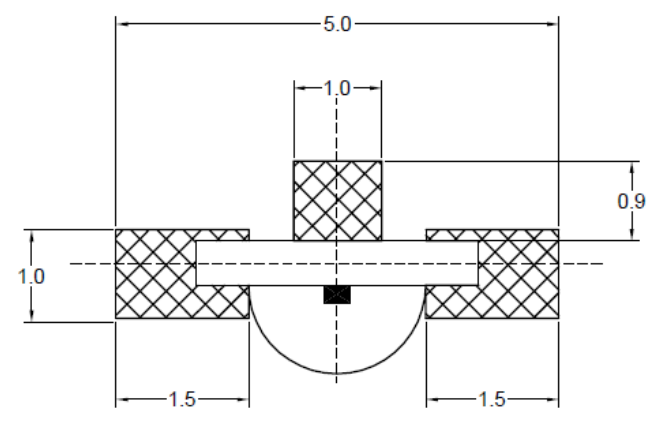


SPECIFICATIONS CSR125W2C

PACKAGE OUTLINES



Recommended Solder Pad



Notes:
 1. All dimensions are in millimeters (inches);
 2. Tolerances are ± 0.1 mm unless otherwise noted.

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CSR125W2C	InGaN	White	Water Clear	178°



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

Parameter	Symbol	Value	Unit
Forward current	I _f	20	mA
Reverse current @ 5V	I _r	50	μA
Power dissipation	P _d	80	mW
Operating temperature range	T _{op}	-40~+85	°C
Storage temperature range	T _{stg}	-40~+90	°C
Peak pulsing current (1/10 duty f= 10KHz)	I _{fp}	100	mA
Soldering Temperature	T _{SOL}	Max 260°C for 5 sec Max	

OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

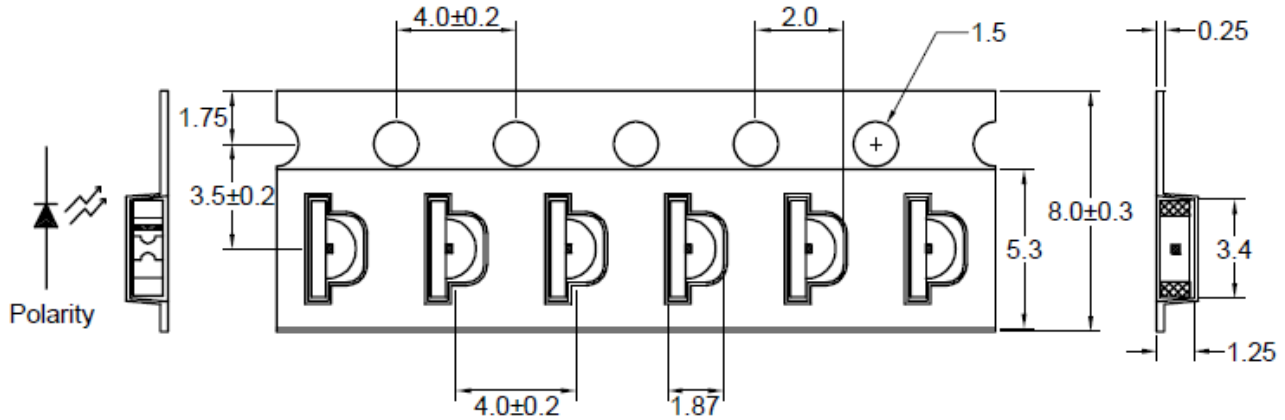
Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Chromaticity Coordinates	X	I _F = 20mA	0.21	-	0.35	
	Y	I _F = 20mA	0.15	-	0.4	
Spectral half bandwidth	Δλ	I _F = 20mA	-	30	-	nm
Forward Voltage	V _f	I _F = 20mA	-	3.5	4.0	V
Luminous intensity	I _v	I _F = 20mA	200	350	-	mcd
Viewing angle at 50% I _v	2Θ ½	I _F = 20mA	-	178		Deg

*NOTE: 1. The forward voltage data did not including ±0.1V tolerance 2. The luminous intensity data did not including ±15% tolerance



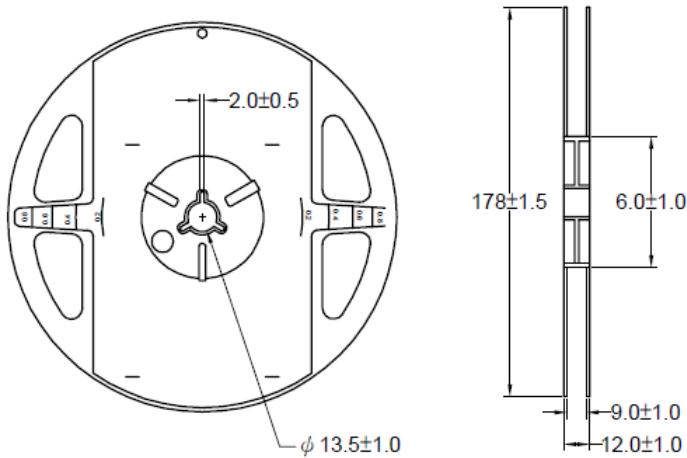
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DIMENSIONS OF TAPE (Unit: mm)



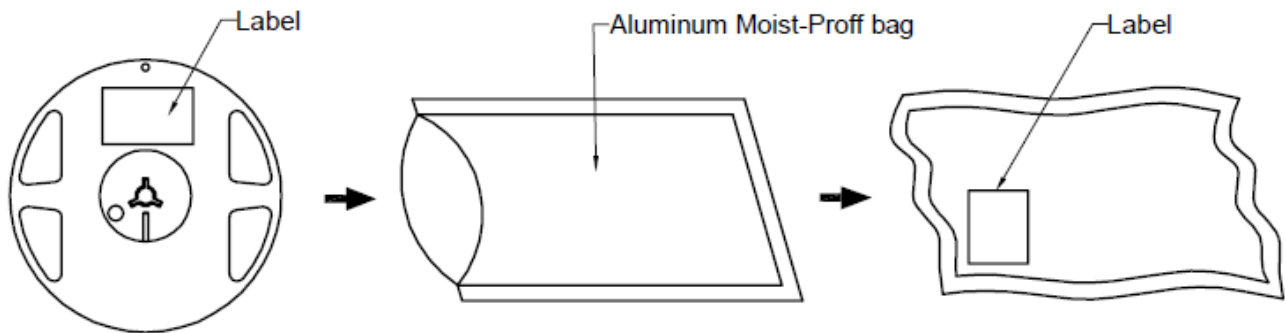
NOTE: The tolerances unless mentioned is ± 0.1 mm, Angle ± 0.5 . Unit = mm.

REEL DIMENSIONS



- NOTES:
1. Empty component pockets are sealed with top cover tape;
 2. The maximum number of missing lamps is two;
 3. The cathode is oriented towards the tape sprocket hole.
 4. 3,000pcs/Reel

PACKAGING SPECIFICATION



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OPTICAL CHARACTERISTIC CURVES

Fig.1 Forward current vs. Forward Voltage

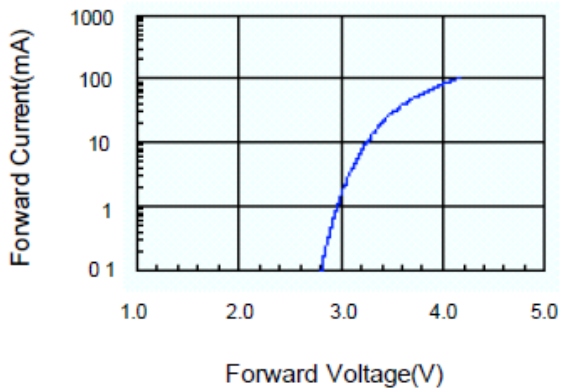


Fig.2 Relative Intensity vs. Forward Current

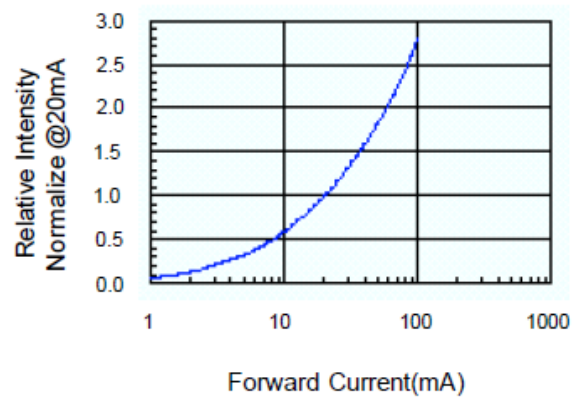


Fig.3 Forward Voltage vs. Temperature

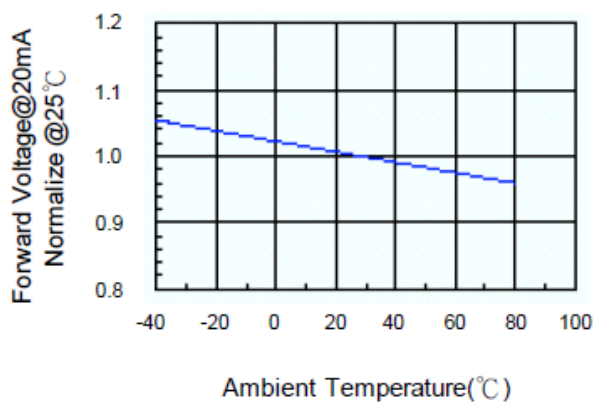


Fig.4 Relative Intensity vs. Temperature

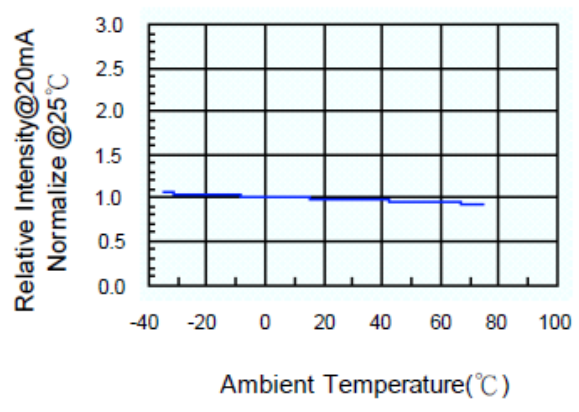


Fig.5 Luminous Spectrum (Ta=25°C)

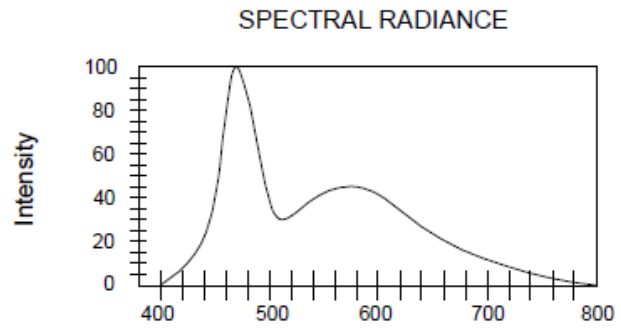
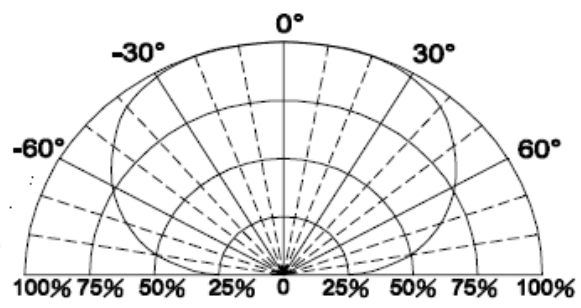


Fig.6 Directive Radiation



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CHROMATICITY COORDINATES SPECIFICATIONS FOR BIN GRADING

BIN	X	Y	BIN	X	Y	BIN	X	Y
A1	0.21	0.190	B1	0.26	0.265	C1	0.31	0.340
	0.21	0.150		0.26	0.225		0.31	0.300
	0.22	0.165		0.27	0.240		0.32	0.315
	0.22	0.205		0.27	0.280		0.32	0.355
A2	0.22	0.205	B2	0.27	0.280	C2	0.32	0.355
	0.22	0.165		0.27	0.240		0.32	0.315
	0.23	0.180		0.28	0.255		0.33	0.330
	0.23	0.220		0.28	0.295		0.33	0.370
A3	0.23	0.220	B3	0.28	0.295	C3	0.33	0.370
	0.23	0.180		0.28	0.255		0.33	0.330
	0.24	0.195		0.29	0.270		0.34	0.345
	0.24	0.235		0.29	0.310		0.34	0.385
A4	0.24	0.235	B4	0.29	0.310	C4	0.34	0.385
	0.24	0.195		0.29	0.270		0.34	0.345
	0.25	0.210		0.30	0.285		0.35	0.360
	0.25	0.250		0.30	0.325		0.35	0.400
A5	0.25	0.250	B5	0.30	0.325			
	0.25	0.210		0.30	0.285			
	0.26	0.225		0.31	0.300			
	0.26	0.265		0.31	0.340			



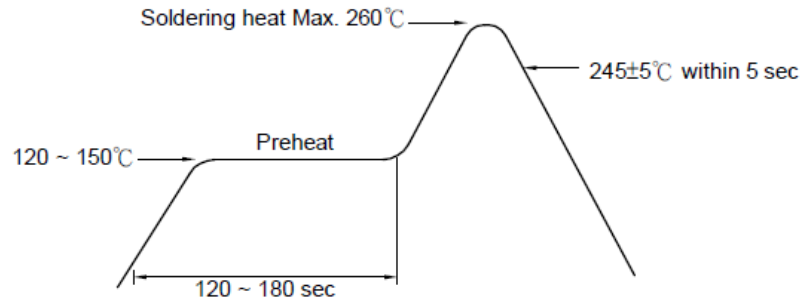
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SOLDERING CONDITIONS – LAMP TYPE LED

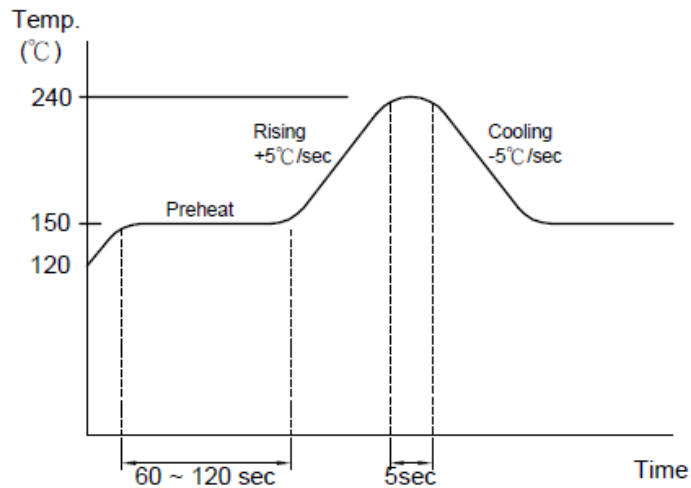
1. Hand Solder

Basic spec is $\leq 280^{\circ}\text{C}$ 3 sec one time only.

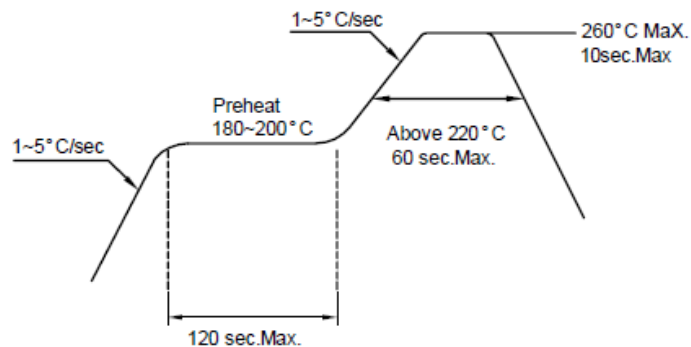
2. Wave Solder



3-1. LEAD Reflow Solder



3-2 PB-Free Reflow Solder



Reflow Soldering should not be done more than two times.



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