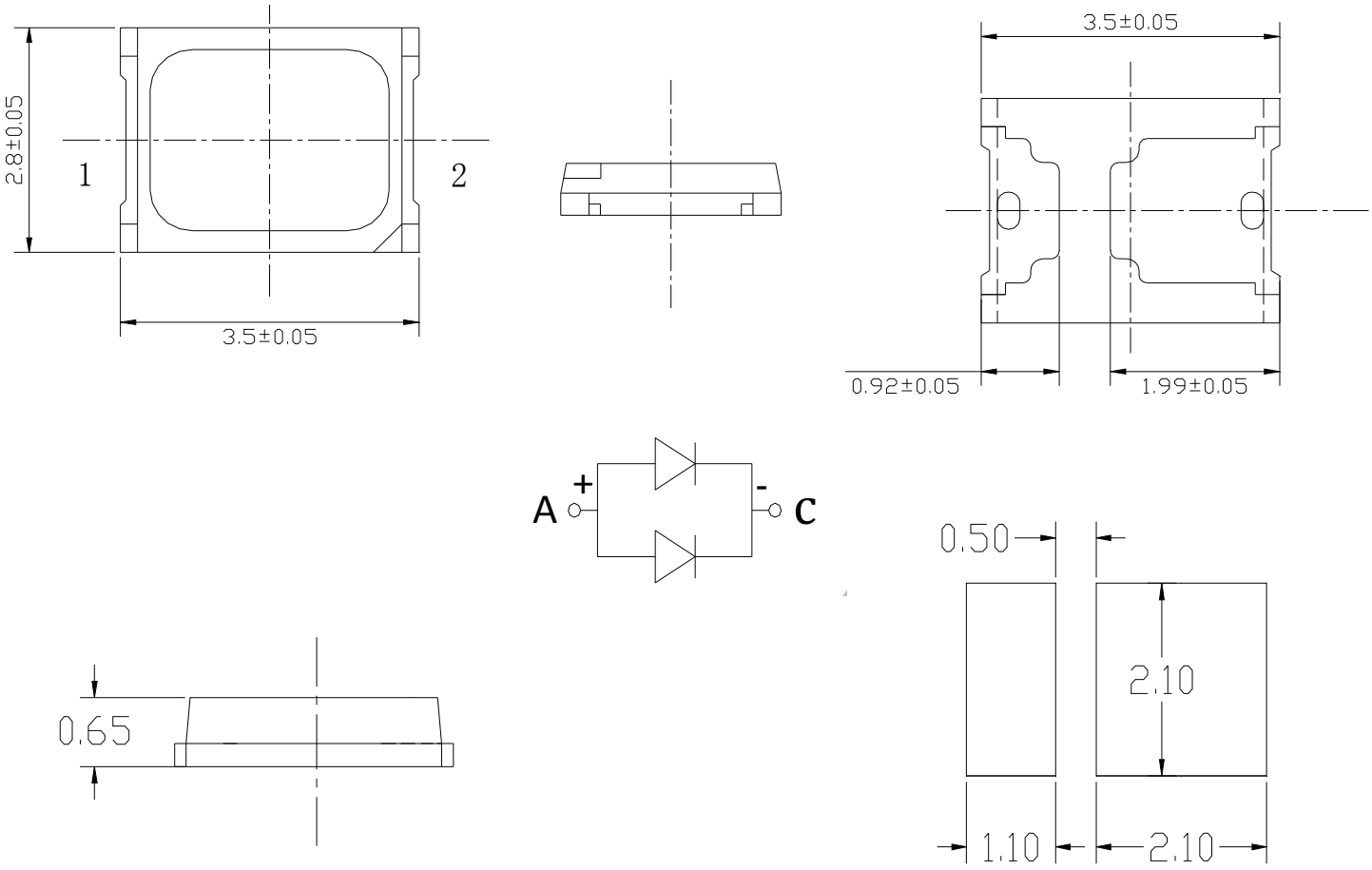
SPECIFICATION CSHF1311W5C65

PACKAGE OUTLINES



Soldering Patterns

Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25mm (0.01") unless otherwised noted.
3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CSHF1311W5C65	InGaN	White	Water Clear	120°

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ABSOLUTE MAXIMUM RATINGS (TA=25°C)

Parameter	Symbol	Max Rating	Unit
Forward Current	I_F	160	mA
Reverse Current @ 5V	I_R	10	μA
Operating Temperature Range	T_{OP}	-40~+85	°C
Storage Temperature Range	T_{STG}	-40~+100	°C
Peak Pulsing Current (1/10 duty f = 10KHz)	I_{FP}	300	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	
Luminous Intensity	Iv	I_F = 60mA	30	33	-	lm
Forward Voltage	V_F	I_F = 60mA	-	2.7	3.0	V
Reverse Leakage Current	I_R	V_R = 5V	-	-	10	μA
Viewing Angle at 50% Iv	2θ1/2	I_F = 60mA	-	120	-	Deg
Color Rendering Index	CRI	I_F = 60mA	80	-	-	-
Correlated Color Temperature	CCT	I_F = 60mA	5904	-	6799	K

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

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OPTICAL CHARACTERISTIC CURVES

Fig.1-Forward Voltage Vs. Forward Current
伏安特性曲线

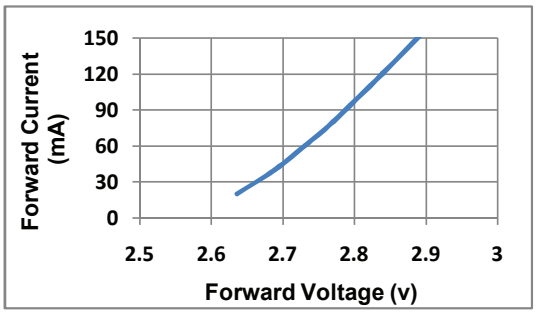


Fig.2-Forward Current Vs. Relative Intensity
正向电流与相对光强特性曲线

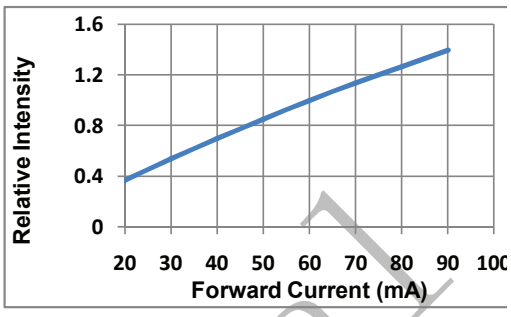


Fig.3-Pin Temperature Vs. Relative Intensity
引脚温度与相对光强特性曲线

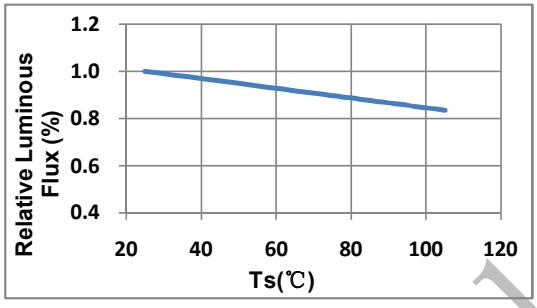


Fig.4-Pin Temperature Vs. Forward Current
引脚温度与正向电流特性曲

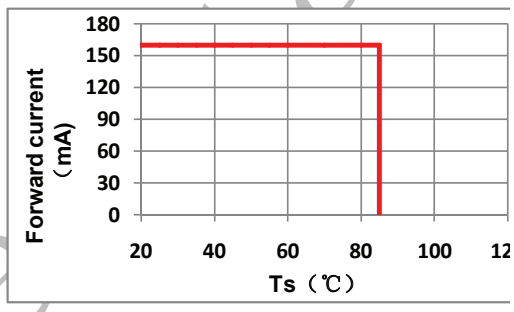


Fig.5-Forward Voltage Vs. Pin Temperature
电压与引脚温度特性曲线

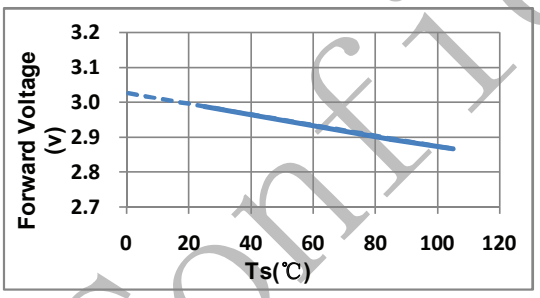


Fig.6-Radiation diagram
辐射特性曲线

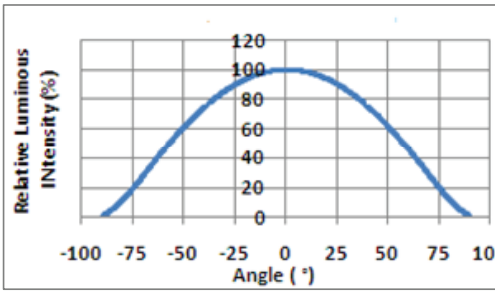
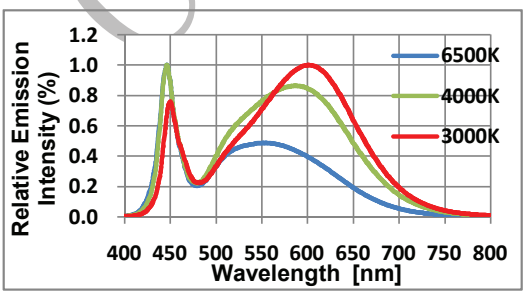


Fig.7- Spectrum Distribution
光谱分布特性曲线



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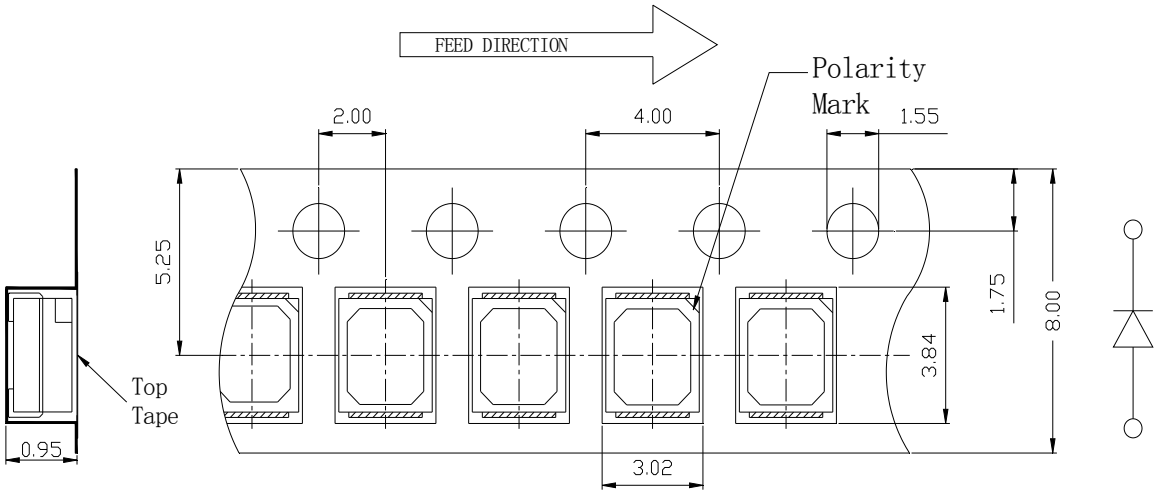
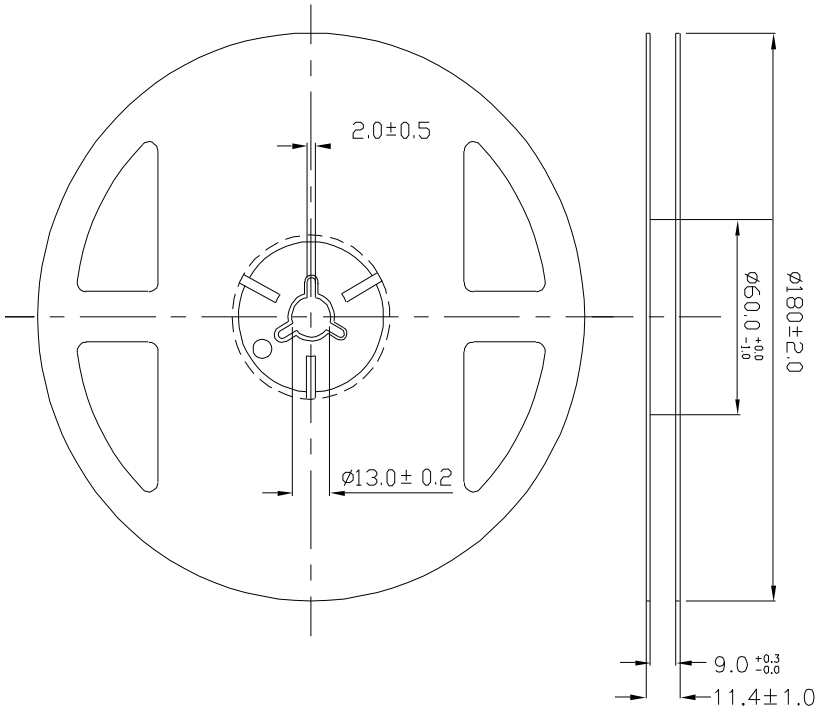
PACKAGING SPECIFICATION

■ Carrier Tape 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 in accordance with ANSI/EIA RS-481 specifications.
4. 3,000 pcs/ Reel.

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SOLDERING CONDITIONS

Reflow profile

■ Soldering condition

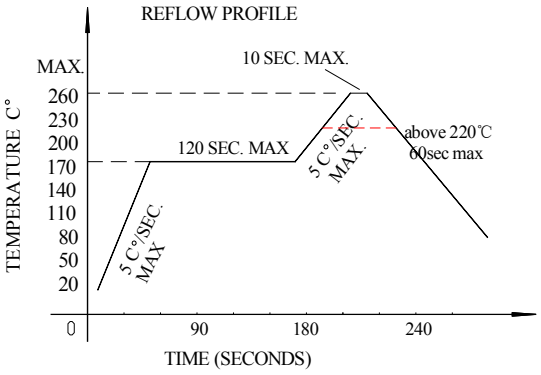
• Recommended soldering conditions

Reflow Soldering		Hand Soldering	
Pre-heat	160～180℃	Temperature	300℃ Max.
Pre-heat time	120 seconds Max.		
Peak temperature	260℃ Max.	Soldering time	3 second Max.
Soldering time	10 seconds Max.		(one time only)
Condition	Refer to Temperature-profile		

• After reflow soldering rapid cooling should be avoided

■ Temperature-profile (Surface of circuit board)

Use the following conditions shown in the figure.



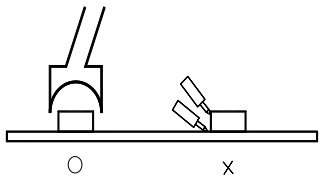
1. Reflow soldering should not be done more than two times
2. When soldering ,do not put stress on the LEDs during heating

■ Soldering iron

1. When hand soldering, keep the temperature of the iron under 300℃, and at that temperature keep the time under 3 sec.
2. The hand soldering should be done only a time
3. The basic spec is ≤5 sec. when the temperature of 260℃, do not contact the resin when hand soldering

■ Rework

1. Customer must finish rework within 5 sec under 260℃
2. The head of iron can not touch the resin
3. Twin-head type is preferred.



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