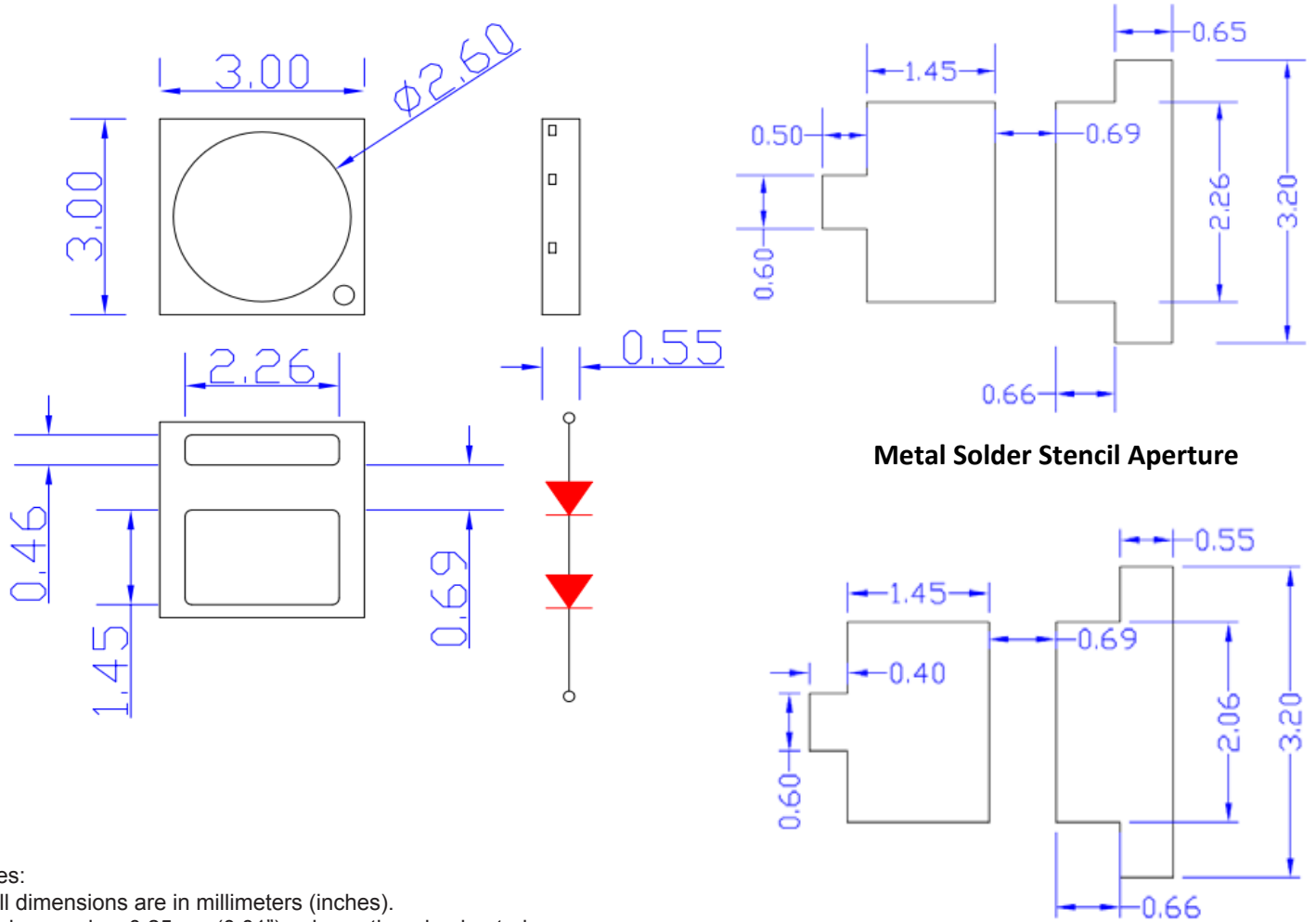


SPECIFICATION **CSHF1212W4C18**
PACKAGE OUTLINES


- 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 |
|---------------|---------------|-------------------|-------------|---------------|
| CSHF1212W4C18 | InGaN | White | Water Clear | 110° |



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

| Parameter | Symbol | Max Rating | Unit |
|--|------------------|--------------------------|------|
| Forward Current | I _F | 180 | mA |
| Reverse Voltage | V _R | 10 | V |
| 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} | 240 | mA |
| Soldering Temperature | T _{SOL} | Max 260°C for 10 sec Max | |

OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

| Parameter | Symbol | Test Condition | Value | | | Unit |
|-------------------------------------|-------------------|------------------------|-------|-----|------|------|
| | | | Min | Typ | Max | |
| Luminous Intensity | I _v | I _F = 150mA | 80 | 85 | - | lm |
| Forward Voltage | V _F | I _F = 150mA | - | 6.0 | 7.0 | V |
| Reverse Leakage Current | I _R | V _R = 5V | - | - | 10 | μA |
| Viewing Angle at 50% I _v | 2θ _{1/2} | I _F = 150mA | - | 110 | - | Deg |
| Color Rendering Index | CRI | I _F = 150mA | 80 | - | - | - |
| Correlated Color Temperature | CCT | I _F = 150mA | 1650 | - | 1875 | 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

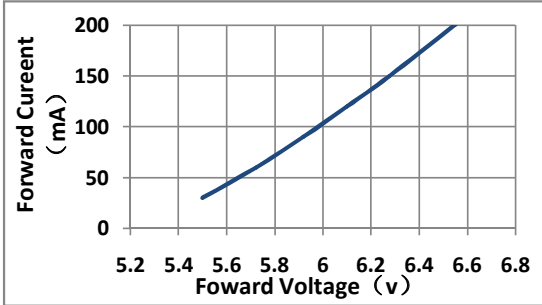


Fig.2-Forward Current Vs. Relative Intensity
正向电流与相对光强特性曲线

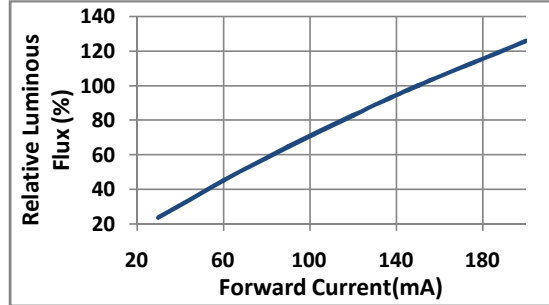


Fig.3- Pin Temperature Vs. Relative Intensity
引脚温度与相对光强特性曲线

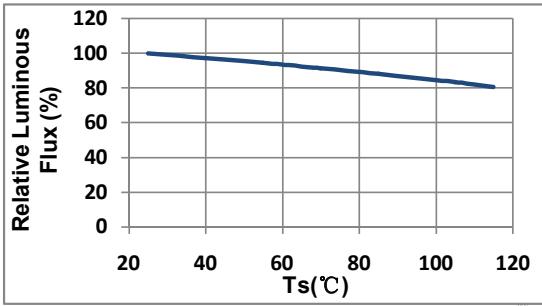


Fig.4- Pin Temperature Vs. Forward Current
引脚温度与正向电流特性曲线

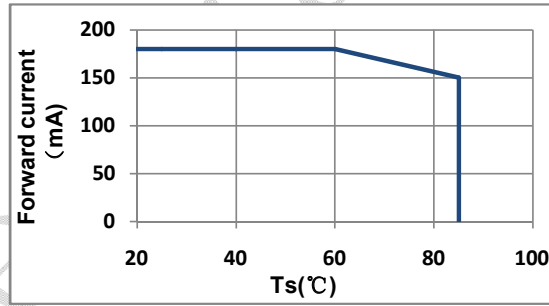


Fig.5-Forward Voltage Vs. Pin Temperature
电压与引脚温度特性曲线

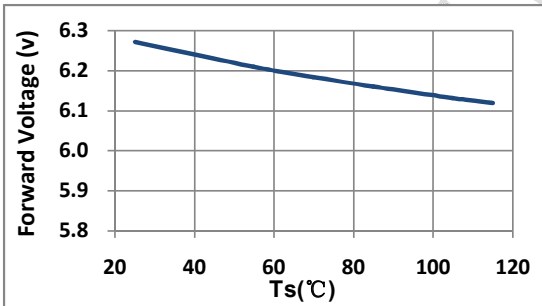


Fig.6-Radiation diagram
辐射特性曲线

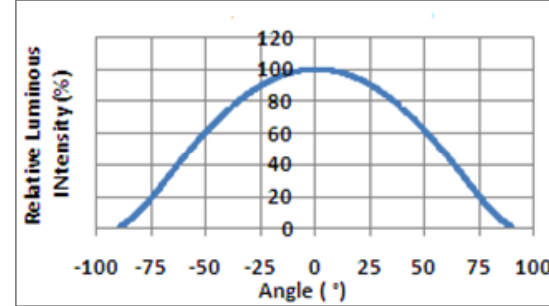


Fig.7-Chromaticity Coordinate Vs. Ts
色坐标与引脚温度特性曲线

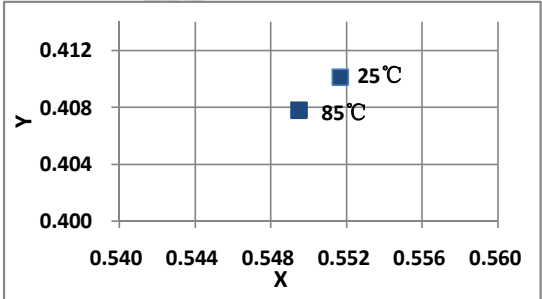
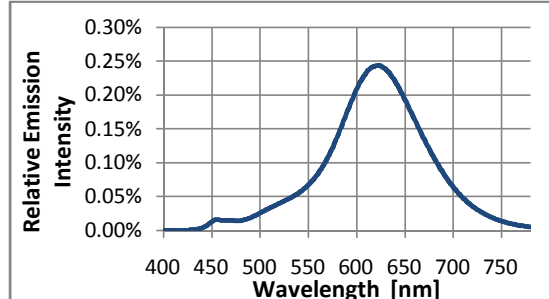


Fig.8- Spectrum Distribution
光谱分布特性曲线



REFOND:WI-E-045

REV:E/0

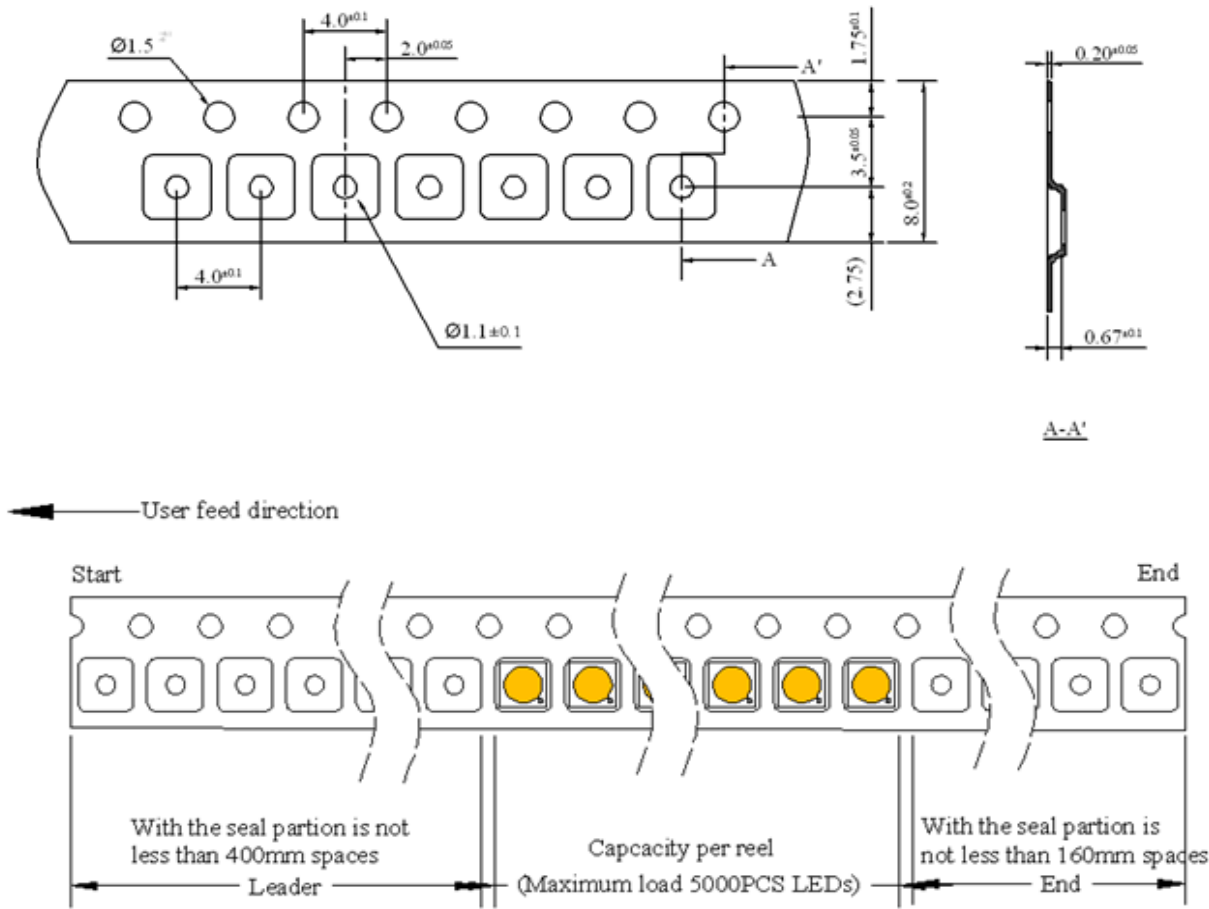
DATE:2016/03/21

PAGE: 6 / 12



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PACKAGING SPECIFICATION

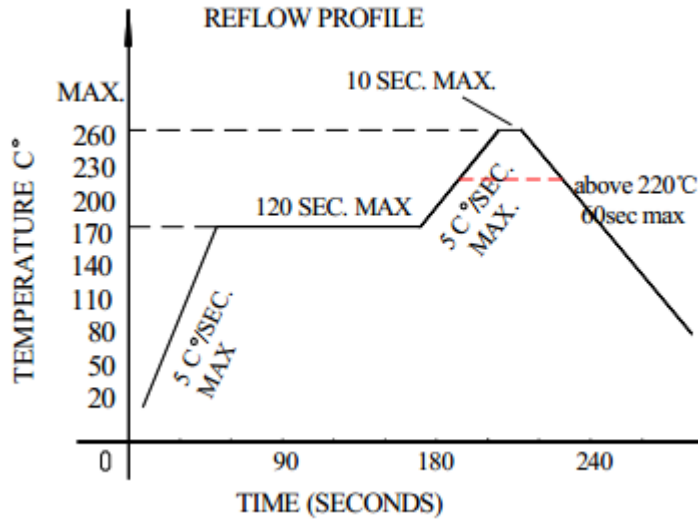


- Quantity : Max 5000pcs/Reel
- Cumulative Tolerance : Cumulative Tolerance/10 pitches to be $\pm 0.2\text{mm}$
- Adhesion Strength of Cover Tape Adhesion strength to be 0.1-0.7N when the cover tape is turned off from the carrier tape at the angle of 10° to the carrier tape.
- Package : P/N, Manufacturing data Code No. and Quantity to be indicated on a damp proof Package.



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SOLDERING CONDITIONS



| Reflow soldering | | Hand Soldering | |
|------------------|------------------------------|----------------|--------------|
| Pre-heat | 160~180°C | Temperature | 300°C Max |
| Pre-heat time | 120 Seconds Max | Soldering time | 3 second Max |
| Peak temperature | 260°C Max | | |
| Soldering time | 10 Seconds Max | | |
| Condition | Refer to Temperature-profile | | |



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