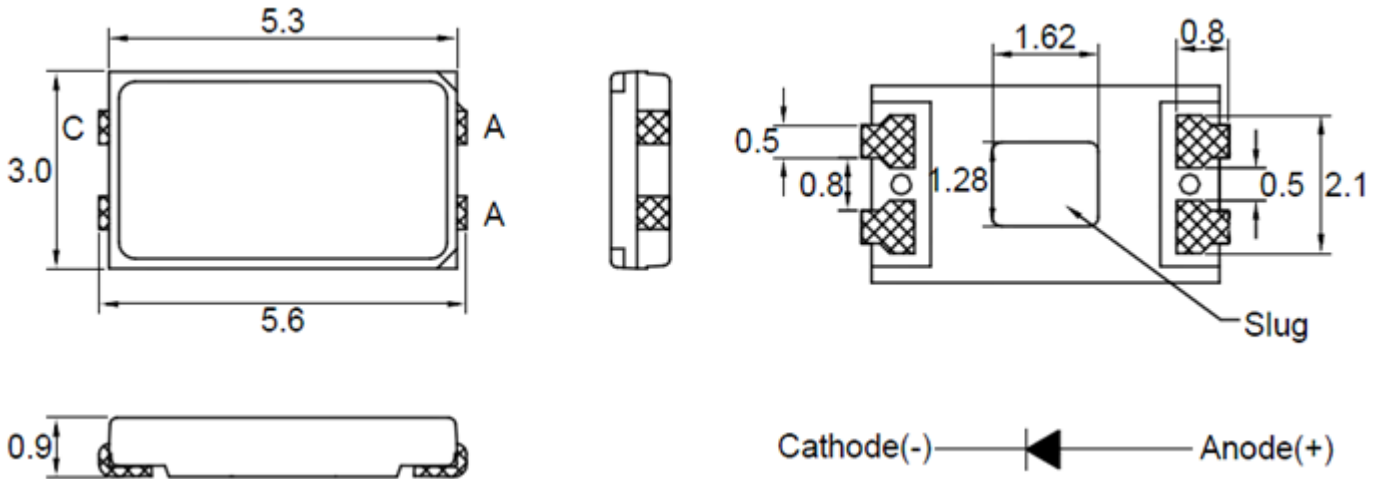
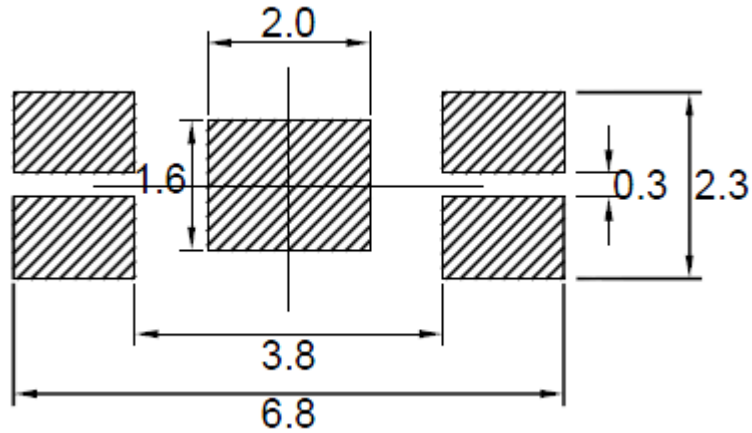


SPECIFICATION **CSH563R2C**
PACKAGE OUTLINES

RECOMMENDED SOLDER PATTERN


- 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
CSH563R2C	InGaAlP	Red	Water Clear	120°



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ABSOLUTE MAXIMUM RATINGS (TA=25°C)

Parameter	Symbol	Max Rating	Unit
Forward Current	I _F	150	mA
Reverse Voltage	V _R	5	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}	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	I _v	I _F = 150mA	5000	7000	-	mcd
Forward Voltage	V _F	I _F = 150mA	-	2.4	3.0	V
Reverse Leakage Current	I _R	V _R = 5V	-	-	10	μA
Viewing Angle at 50% I _v	2θ _{1/2}	I _F = 150mA	-	120	-	Deg
Dominant Wavelength	λ _D	I _F = 150mA	-	625	-	nm
Spectral Line Half-Width	Δλ	I _F = 150mA	-	15	-	nm

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



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OPTICAL CHARACTERISTIC CURVES

Fig.1 Forward current vs. Forward Voltage

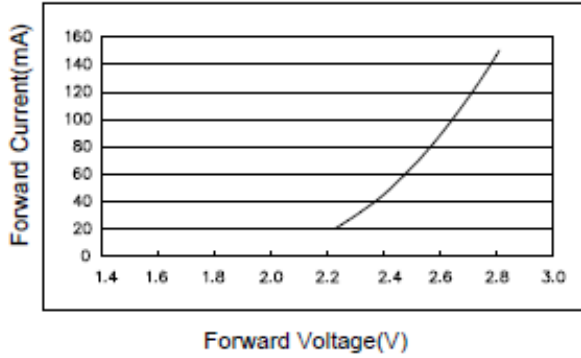


Fig.2 Forward current vs. Luminous Intensity

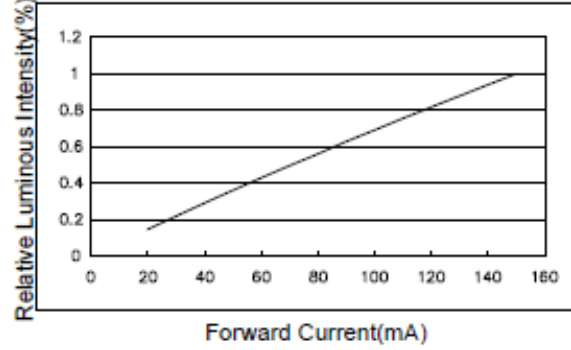


Fig.3 Directivity Radiation

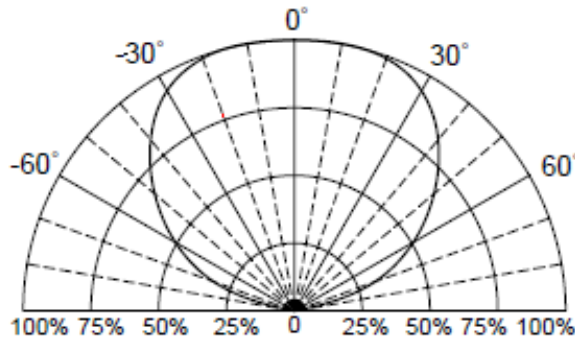
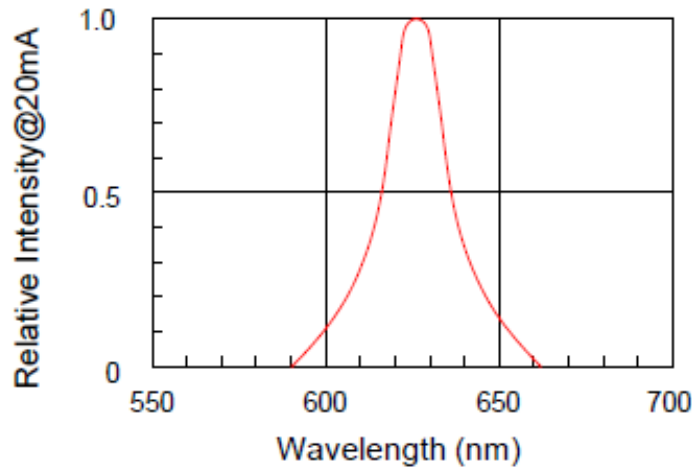


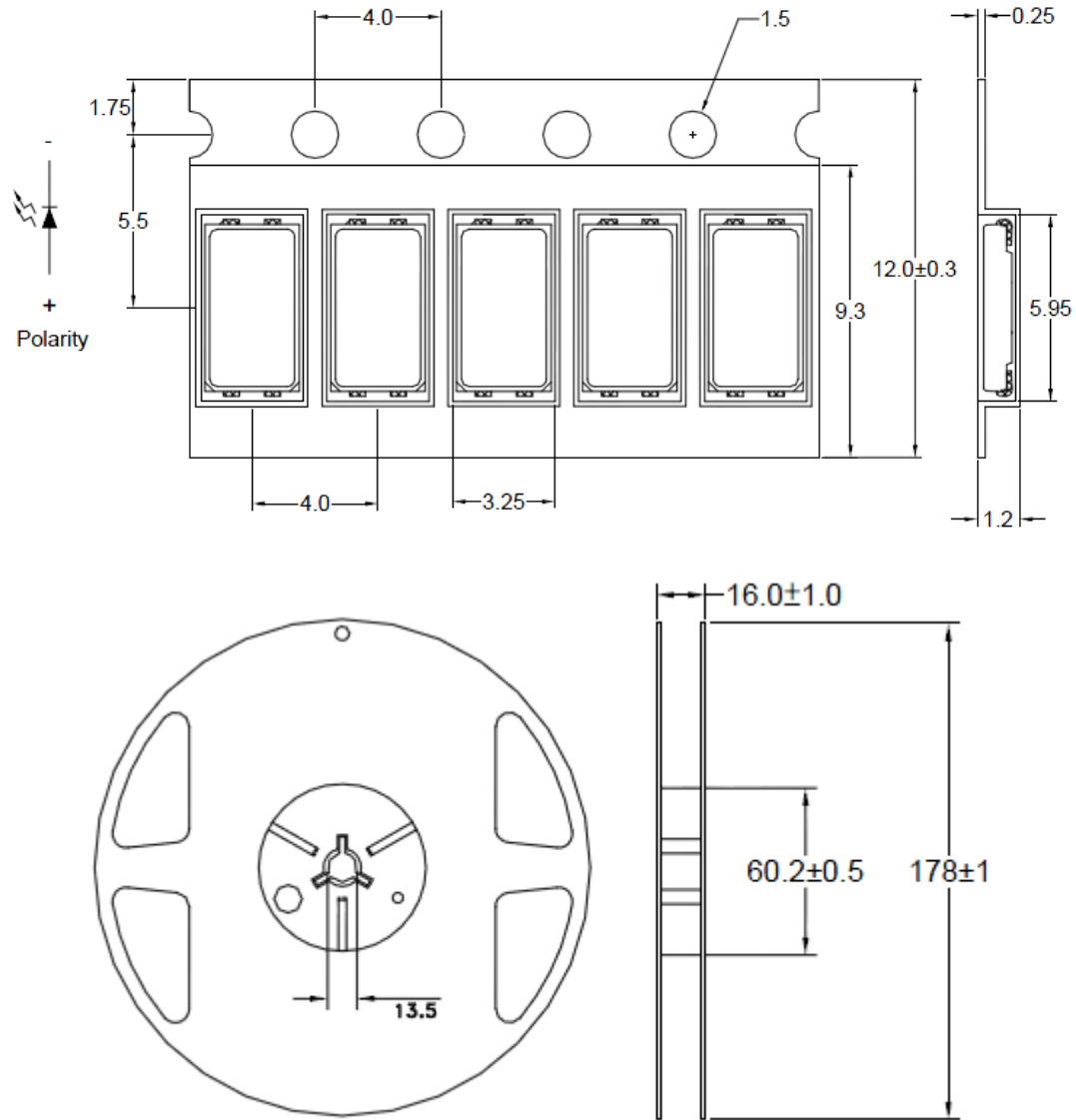
Fig.4 Relative Intensity vs. Wavelength



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PACKAGING SPECIFICATION

PACKAGING DIMENSION



Notes:

1. Tolerance unless mentioned is ±0.2mm, Unit=mm.
2. 2000pcs/Reel.



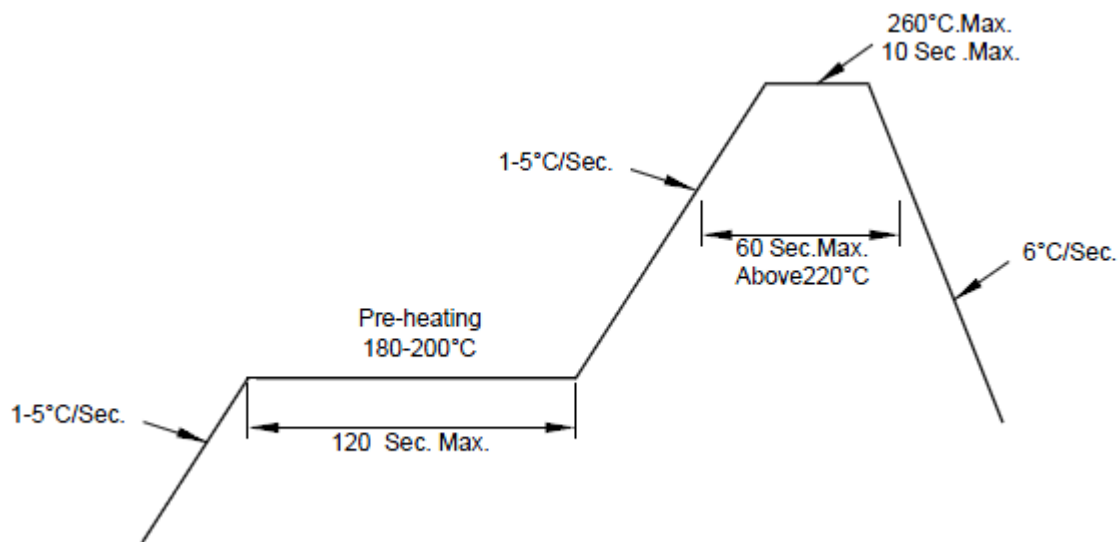
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SOLDERING CONDITIONS

RECOMMENDED REFLOW SOLDERING PROFILE

Pb-Free soldering temperature profile

Pb -free solder Temperature profile	
Pre-heat	180-200°C
Pre-heat time	120 Sec Max
Peak-Temperature	260°C Max
Soldering time condition	10 Sec Max



- Reflow soldering should not be done more than two times.
- When soldering, do not put stress on LEDs during heating.
- After soldering, do not warp the circuit board.
- The encapsulated material of the LEDs is silicone.
- Precautions should be taken to avoid strong pressure on the encapsulated part. So when using the chip mounter, the picking up nozzle that does not affect the silicone resin should be used.
- Hand soldering should not exceed 3 seconds at maximum 320°C under soldering iron (one time only).



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