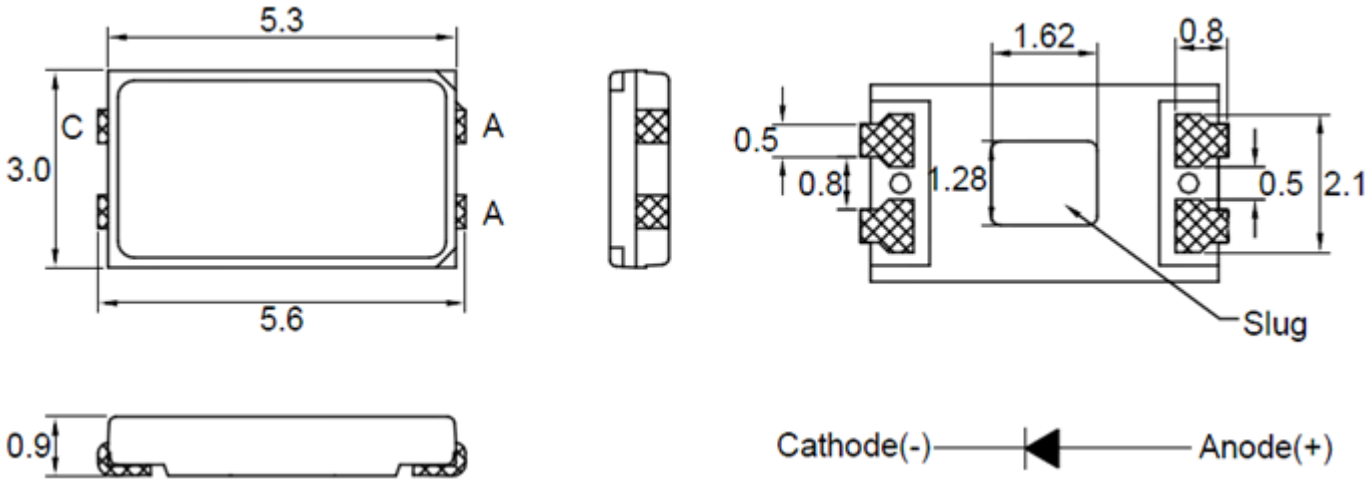
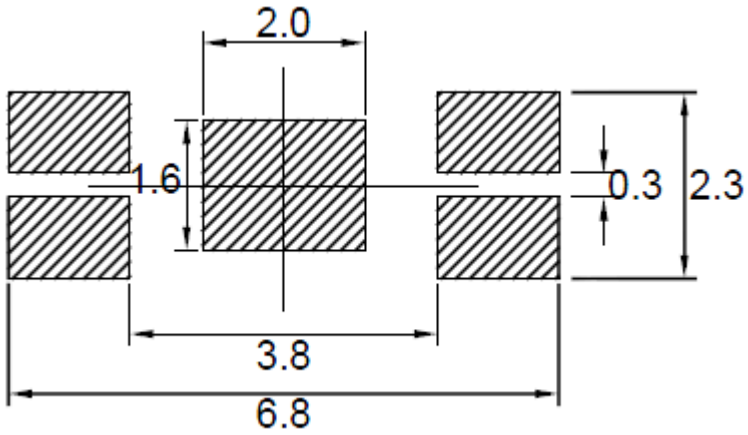
SPECIFICATION CSH563Y2C

PACKAGE OUTLINES



RECOMMENDED SOLDER PATTERN



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
CSH563Y2C	InGaAlP	Yellow	Water Clear	120°

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}	180	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 = 150mA	4000	5500	-	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% Iv	2θ1/2	I_F = 150mA	-	120	-	Deg
Dominant Wavelength	λ_D	I_F = 150mA	-	590	-	nm
Spectral Line Half-Width	Δλ	I_F = 150mA	-	20	-	nm

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

RoHS Compliant Lead Free

ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com

OPTICAL CHARACTERISTIC CURVES

Fig.1 Forward current vs. Forward Voltage

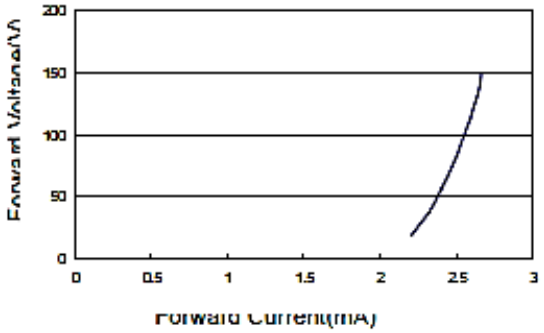


Fig.2 Forward current vs.Luminous Intensity

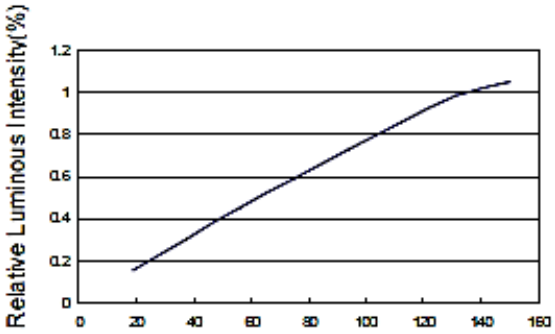


Fig.3 Directivity Radiation

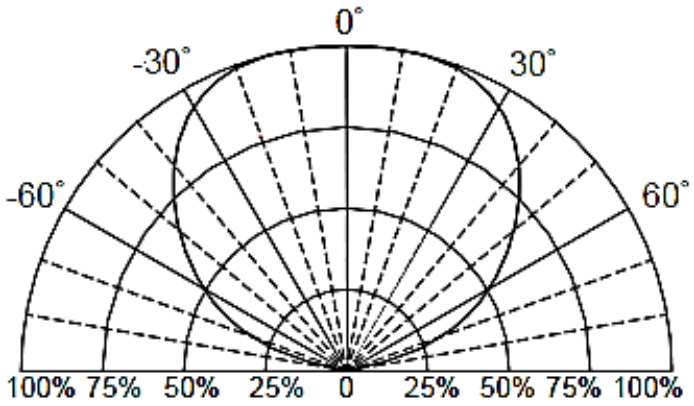
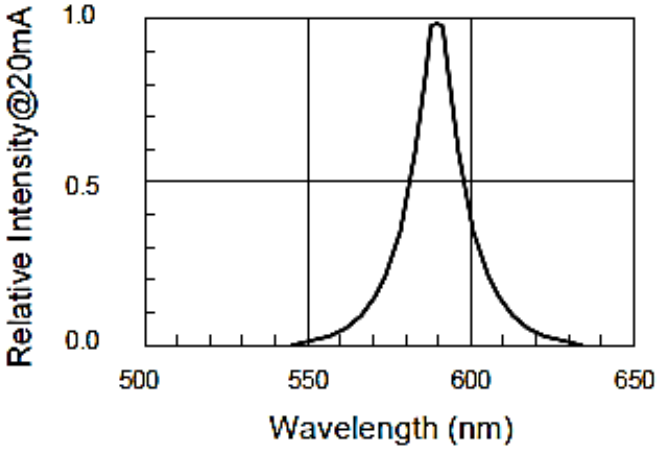
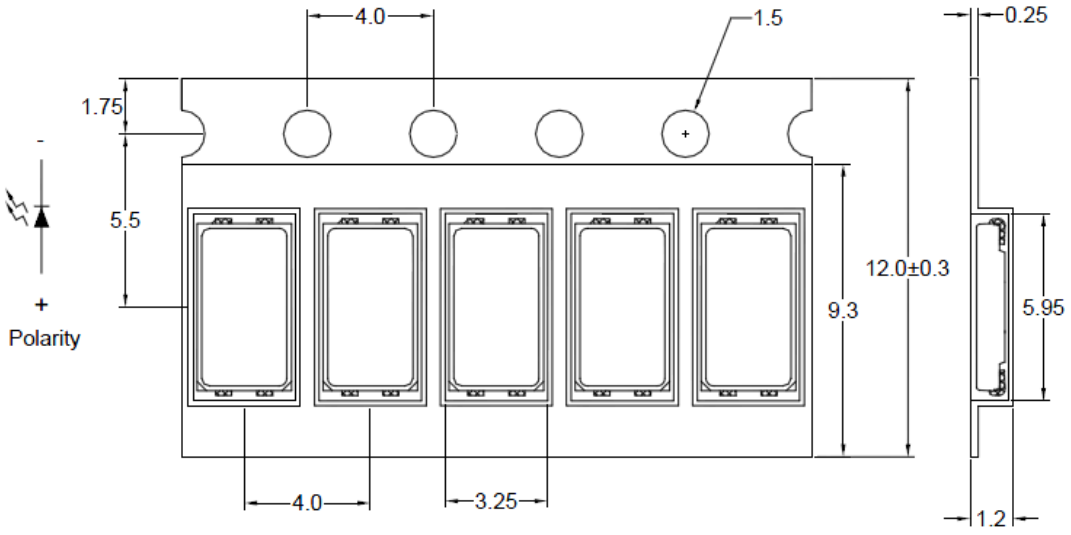


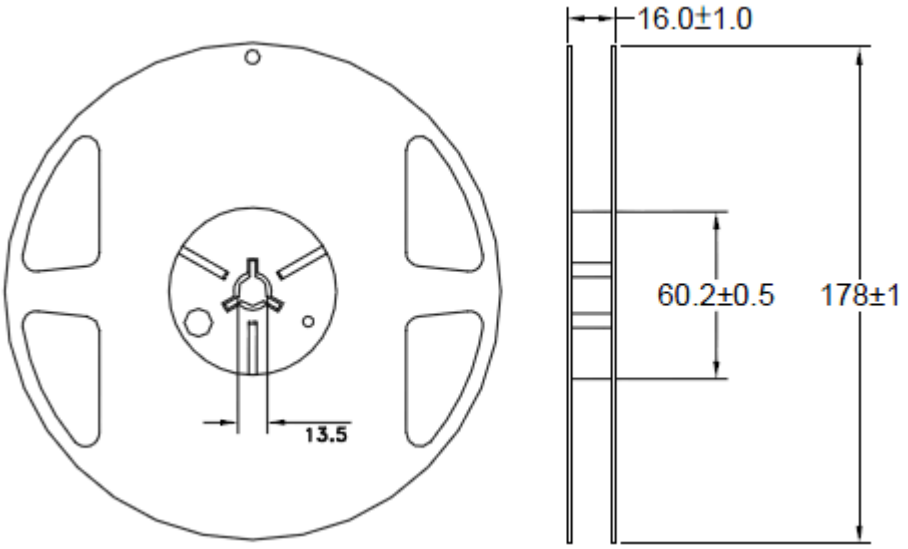
Fig.4 Relative Intensity vs. Wavelength



PACKAGING SPECIFICATION

PACKAGING DIMENSION





Notes:

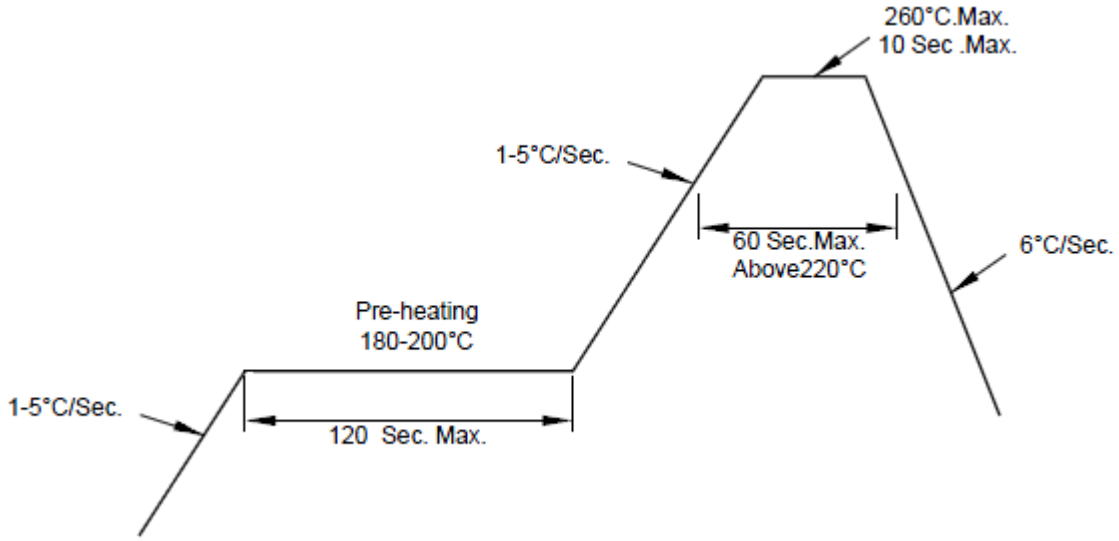
1. Tolerance unless mentioned is ±0.2mm, Unit=mm.
2. 2000pcs/Reel.

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).