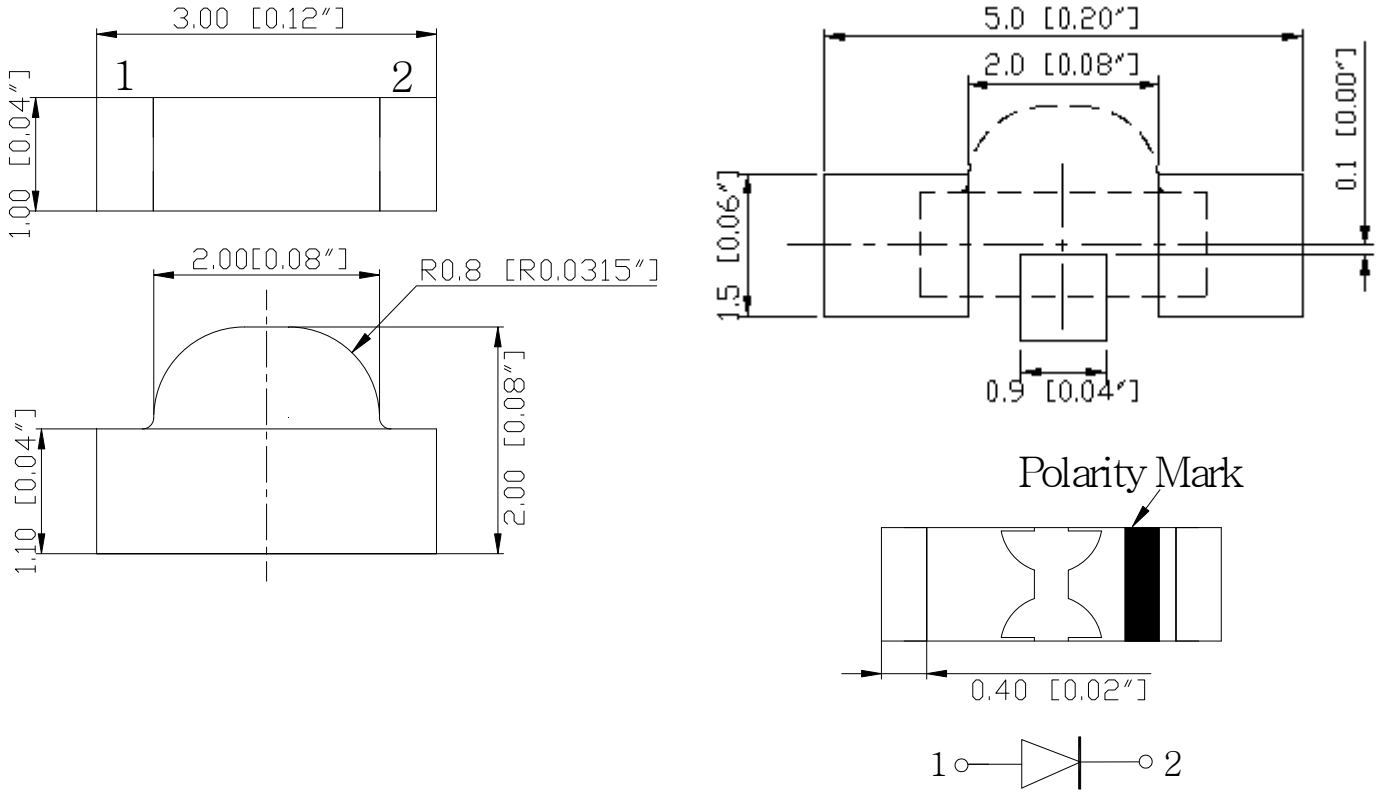
SPECIFICATION CSR123Y2C

PACKAGE OUTLINES



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
CSR123Y2C	InGaAlP	Yellow	Water Clear	150°

ABSOLUTE MAXIMUM RATINGS (TA=25°C)

Parameter	Symbol	Max Rating	Unit
Forward Current	I_F	30	mA
Reverse Current @ 5V	I_R	10	μA
Power Dissipation	Pd	75	mW
Operating Temperature Range	T_{OP}	-40~+80	°C
Storage Temperature Range	T_{STG}	-40~+85	°C
Peak Pulsing Current (1/10 duty f = 10KHz)	I_{FP}	125	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 = 20mA	80	170	-	mcd
Forward Voltage	V_F	I_F = 20mA	-	2.0	2.5	V
Reverse Leakage Current	I_R	V_R = 5V	-	-	10	μA
Viewing Angle at 50% Iv	2θ1/2	I_F = 20mA	-	150	-	Deg
Peak Wavelength	λ_P	I_F = 20mA	-	595	-	nm
Dominant Wavelength	λ_D	I_F = 20mA	585	-	595	nm

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

RoHS Compliant Lead Free

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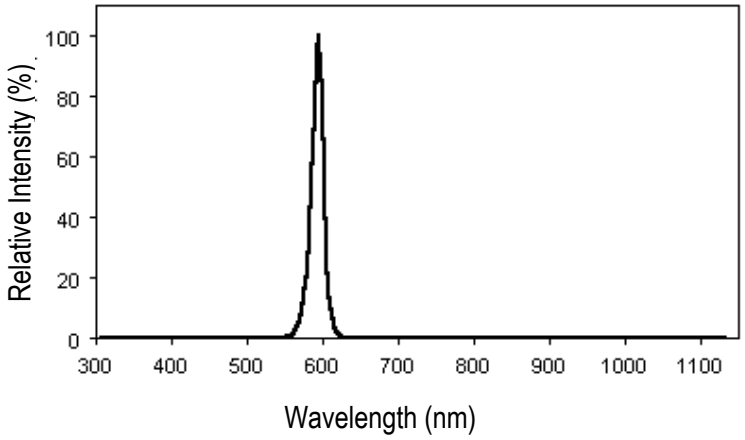
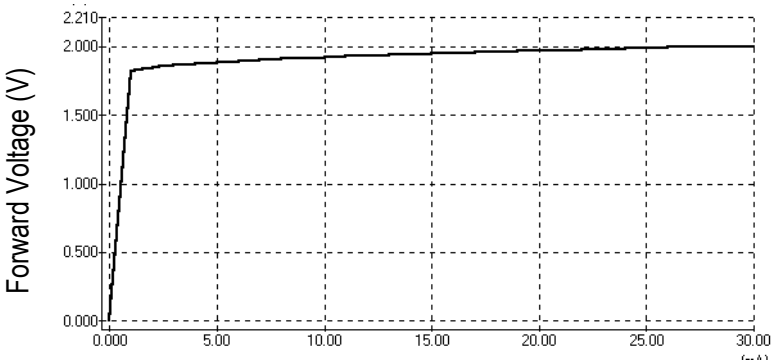
OPTICAL CHARACTERISTIC CURVES

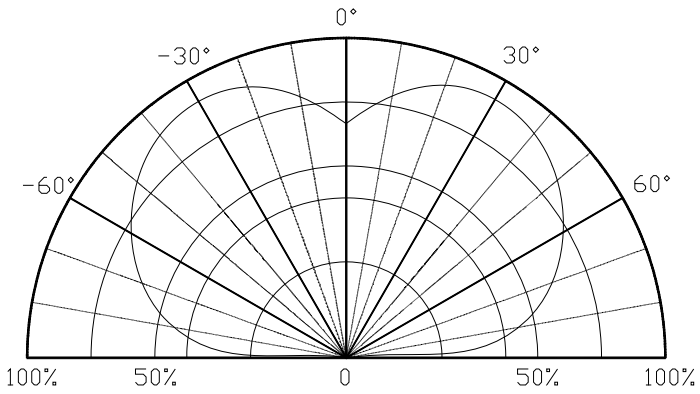
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage



Directive Characteristics



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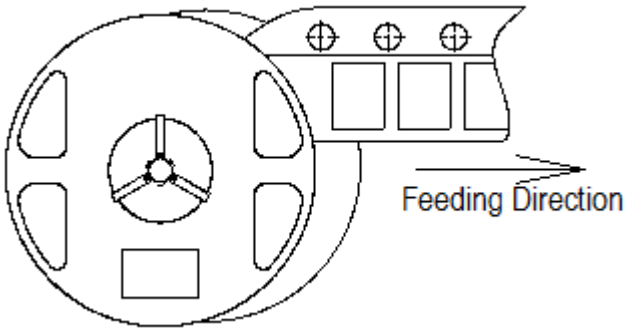
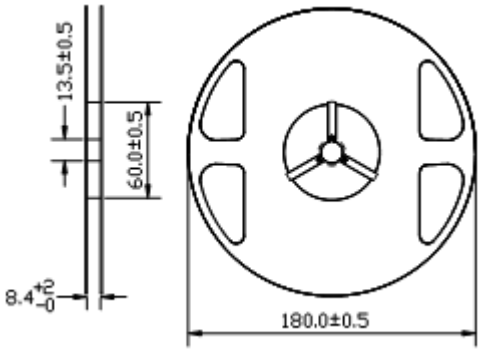
PACKAGING SPECIFICATION

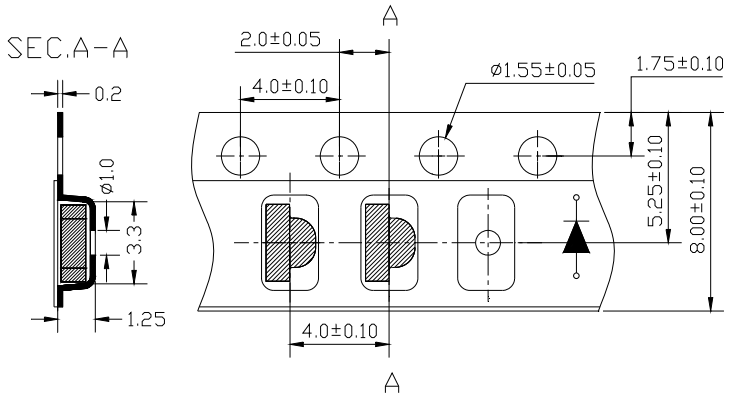
- Feeding Direction



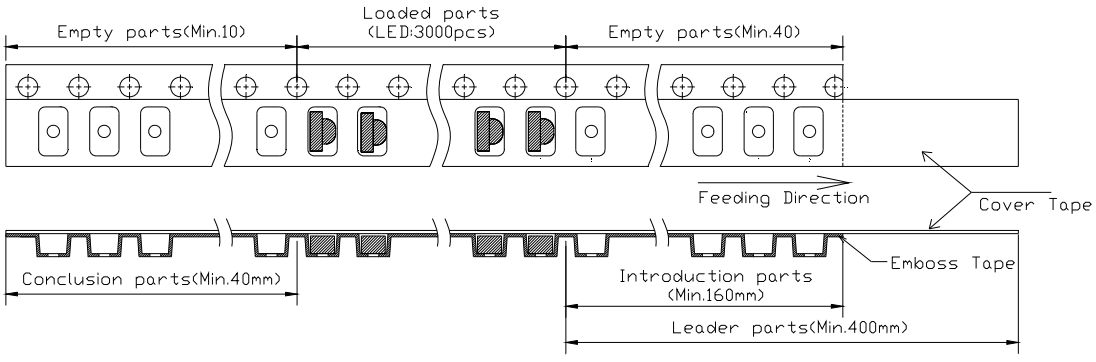
- Dimensions of Reel (unit: mm)



- Dimensions of Tape (unit: mm)



- Arrangement of Tape



Notes:

1. Empty component pockets are sealed with top cover tape
2. Maximum number of missing lamps is two
3. Cathode is oriented towards the tape sprocket hole
4. 3,000 pcs/Reel

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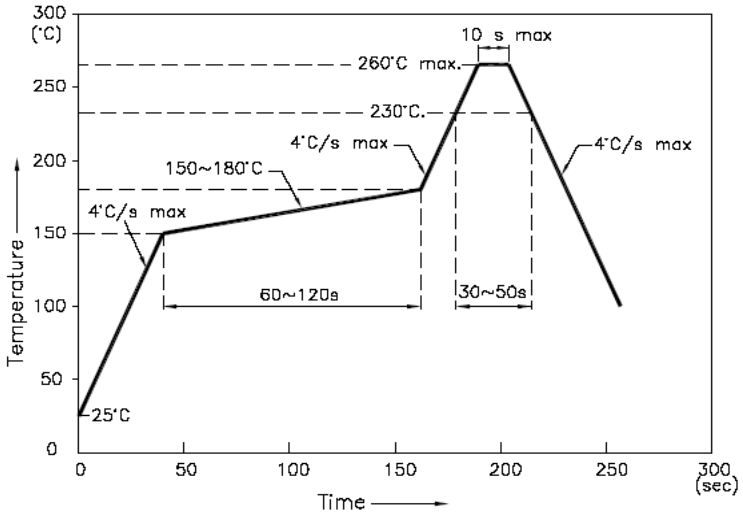
SOLDERING CONDITIONS

REFLOW PROFILE

- Reflow Temp/Time



1. We Recommend the reflow temperature 245 ºC (±5 ºC). The maximum soldering temperature should be limited to 260 ºC.
2. Don't cause stress to epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

- Soldering Iron

  Basic spec is ≤ 5 sec when 260 ºC. If temperature is higher, time should be shorter (+10 ºC→-1sec). Power dissipation of iron should be smaller than 20W and temperature should be controllable. Surface temperature of the device should be under 230 ºC.

- Rework

1. Customer must finish rework within 5 sec under 260 ºC.
2. The head of iron cannot touch copper foil.
3. Twin-head type is preferred.