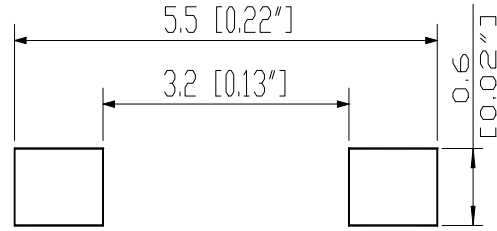
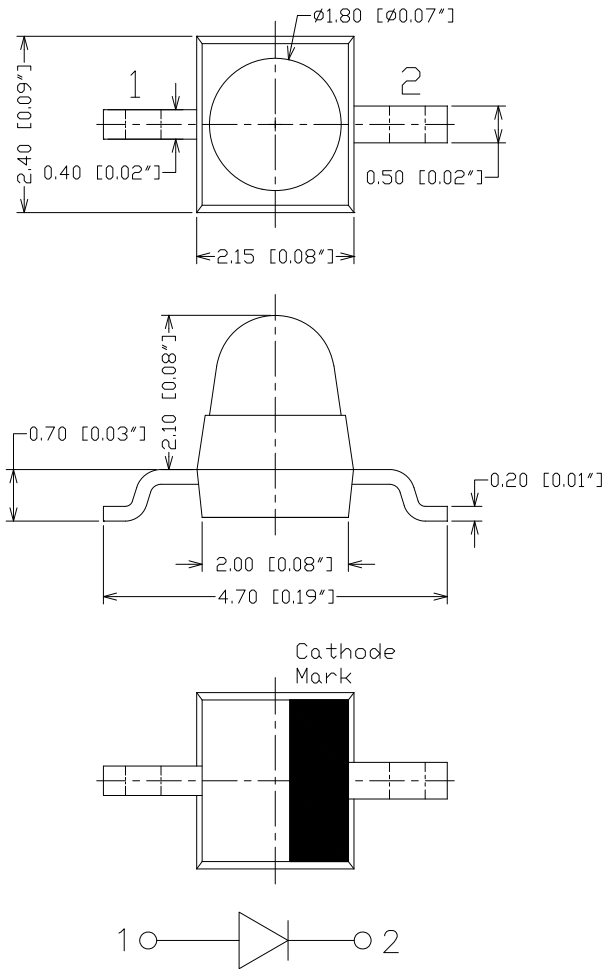


SPECIFICATION
CSM28IR880CG
PACKAGE OUTLINES


ITEM	MATERIALS
Resin (mold)	Epoxy
Bonding Wire	Ø 25 µm Au
Lens color	Water transparent
Dice	AlGaAs
Emitted color	Infrared

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
CSM28IR880CG	AlGaAs/GaAs	Infrared	Water Clear	20°



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

Parameter	Symbol	Max Rating	Unit
Forward Current	IF	50	mA
Reverse Current @ 5V	IR	5	μA
Power Dissipation	Pd	95	mW
Operating Temperature Range	TOP	-40~+80	°C
Storage Temperature Range	TSTG	-40~+85	°C
Peak Pulsing Current (1/10 duty f = 10KHz)	IFP	1	A
Soldering Temperature	TSOL	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	IF = 20mA	-	1.8	-	mW/sr
Forward Voltage	VF	IF = 20mA	-	1.4	1.8	V
Reverse Leakage Current	IR	VR = 5V	-	-	10	μA
Viewing Angle at 50% Iv	2θ1/2	IF = 20mA	-	20	-	Deg
Peak Wavelength	λP	IF = 20mA	-	880	-	nm

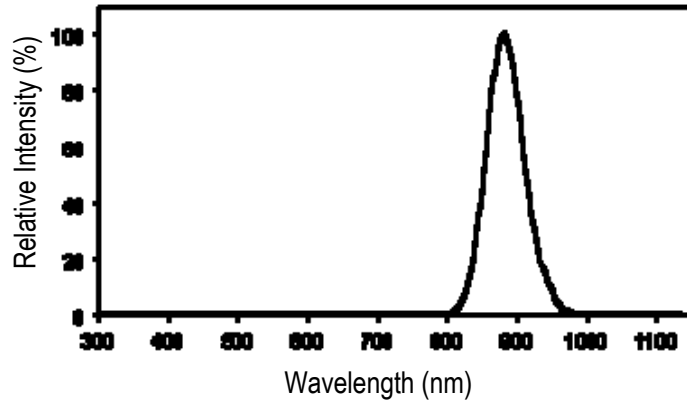
*Tolerance of viewing angle: -10 / +5 deg.



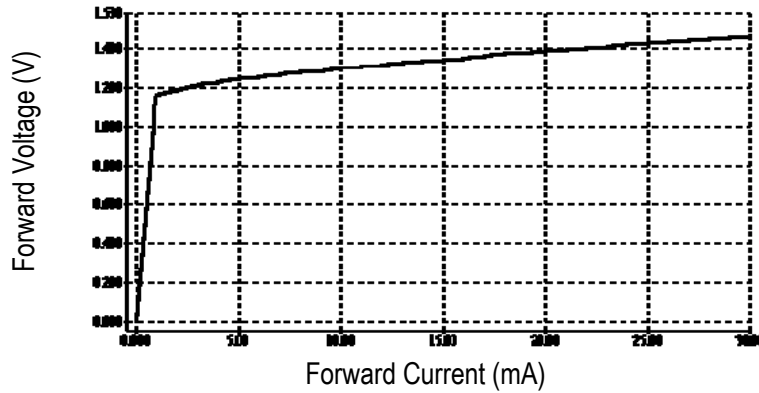
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OPTICAL CHARACTERISTIC CURVES

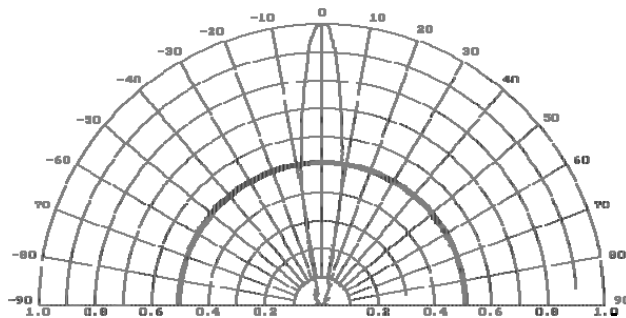
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage



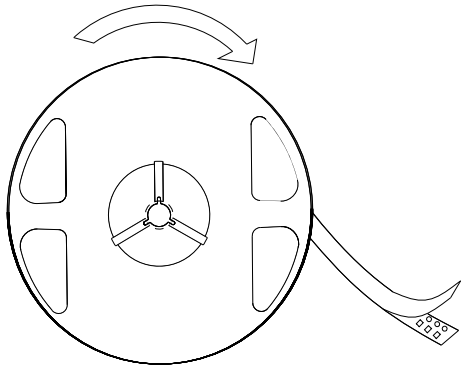
Directive Characteristics



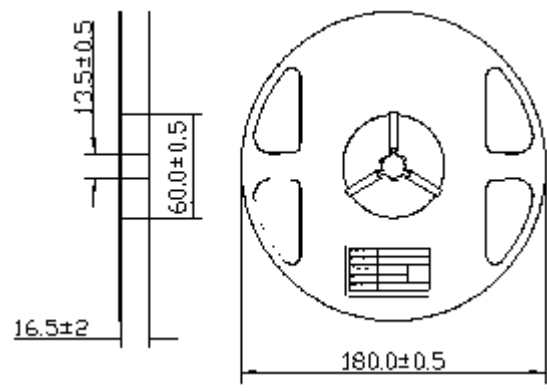
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PACKAGING SPECIFICATION

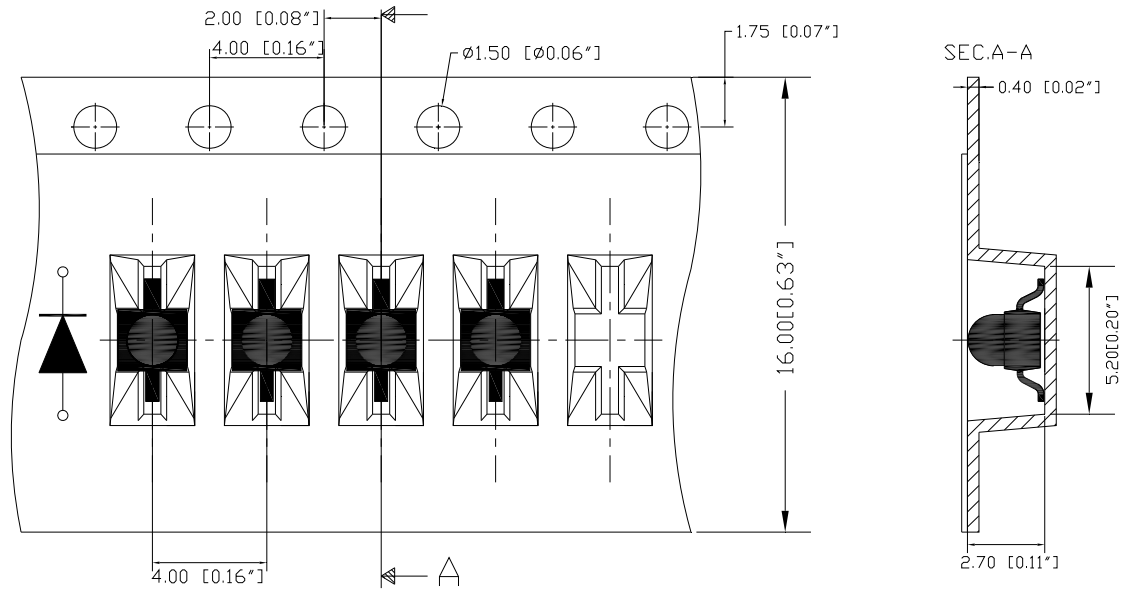
● Feeding Direction




● Dimensions of Reel (Unit: mm)

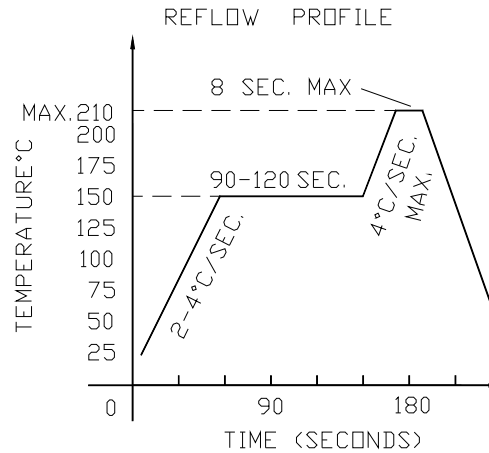


● Dimensions of Tape (Unit: mm)




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SOLDERING CONDITIONS

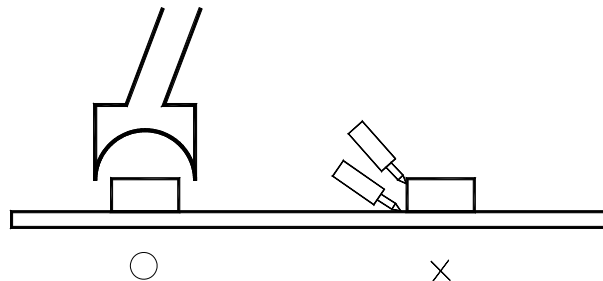


NOTES:

1. We recommend the reflow temperature 245°C ($\pm 5^\circ\text{C}$).the maximum soldering temperature should be limited to 260°C.
2. dont cause stress to the 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 $\leq 5\text{sec}$ when 260°C. If temperature is higher, time should be shorter
 - (+10°C \rightarrow -1sec).Power dissipation of iron should be smaller than 20W, and temperatures should be controllable .Surface temperature of the device should be under 230°C .

Rework

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



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