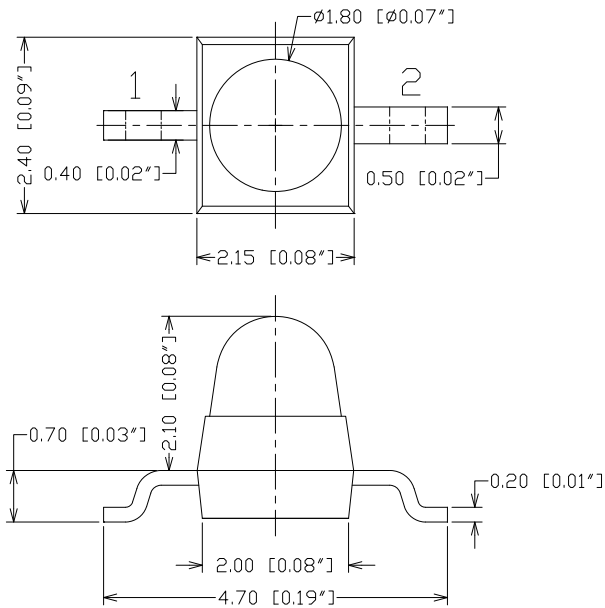
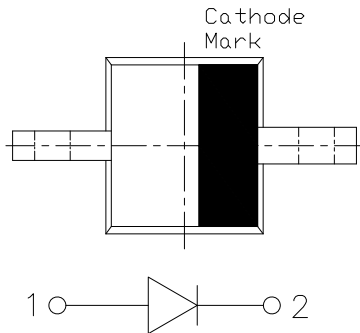
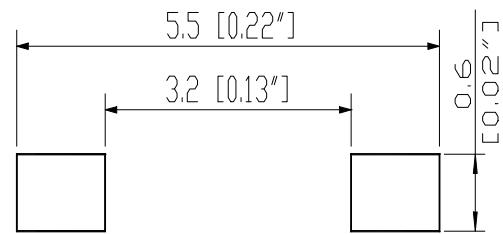


SPECIFICATION
CSM28IR940CZ
PACKAGE OUTLINES

RECOMMEND PAD LAYOUT


ITEM	MATERIALS
Resin (mold)	Epoxy
Lens color	Water transparent
Dice	AlGaAs/GaAs
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
CSM28IR940CZ	AlGaAs/GaAs	Infrared	Water Clear	20°



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

Parameter	Symbol	Max Rating	Unit
Forward Current	I _F	100	mA
Reverse Current @ 5V	I _R	5	μA
Power Dissipation	P _d	180	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}	1	A
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 = 100mA	12	14	-	mW/sr
Forward Voltage	V _F	I _F = 100mA	-	1.4	1.8	V
Reverse Leakage Current	I _R	V _R = 5V	-	-	10	μA
Viewing Angle at 50% I _v	2θ _{1/2}	I _F = 100mA	-	20	-	Deg
Peak Wavelength	λ _P	I _F = 100mA	-	950	-	nm
Dominant Wavelength	λ _D	I _F = 100mA	-	940	-	nm

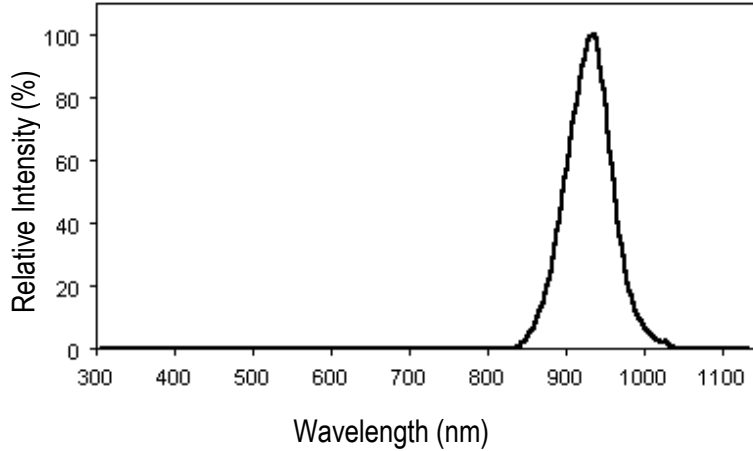
*Tolerance of viewing angle: -10 / +5 deg.



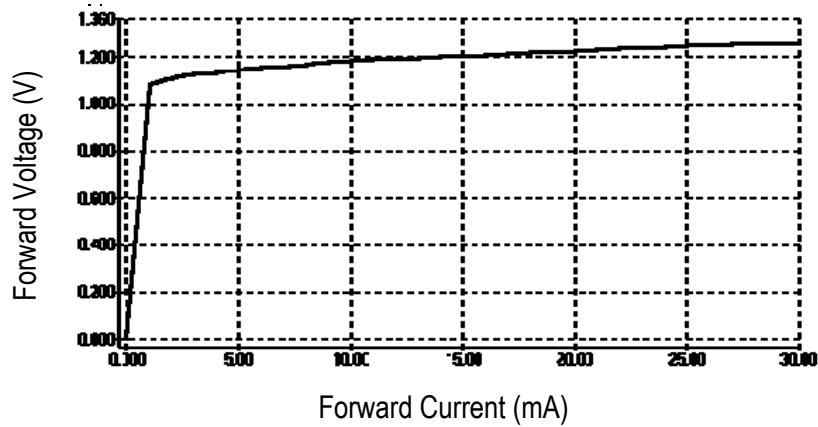
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OPTICAL CHARACTERISTIC CURVES

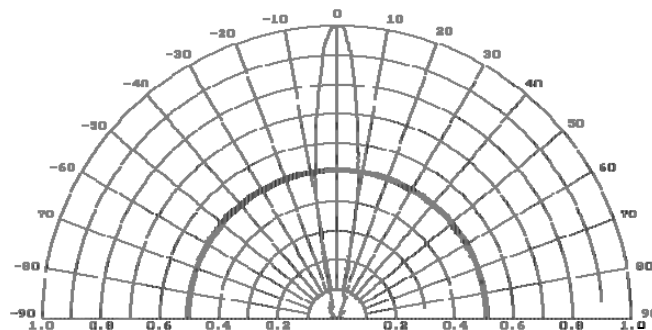
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage



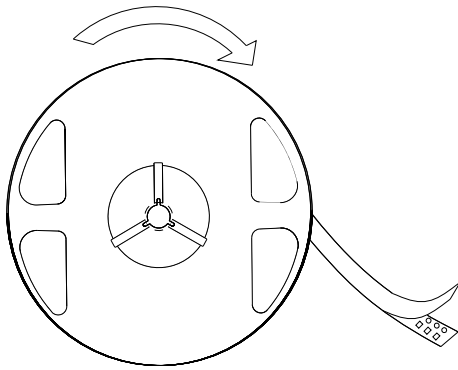
Directive Characteristics



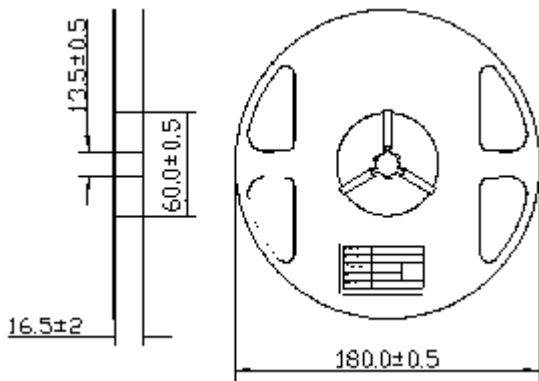
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PACKAGING SPECIFICATION

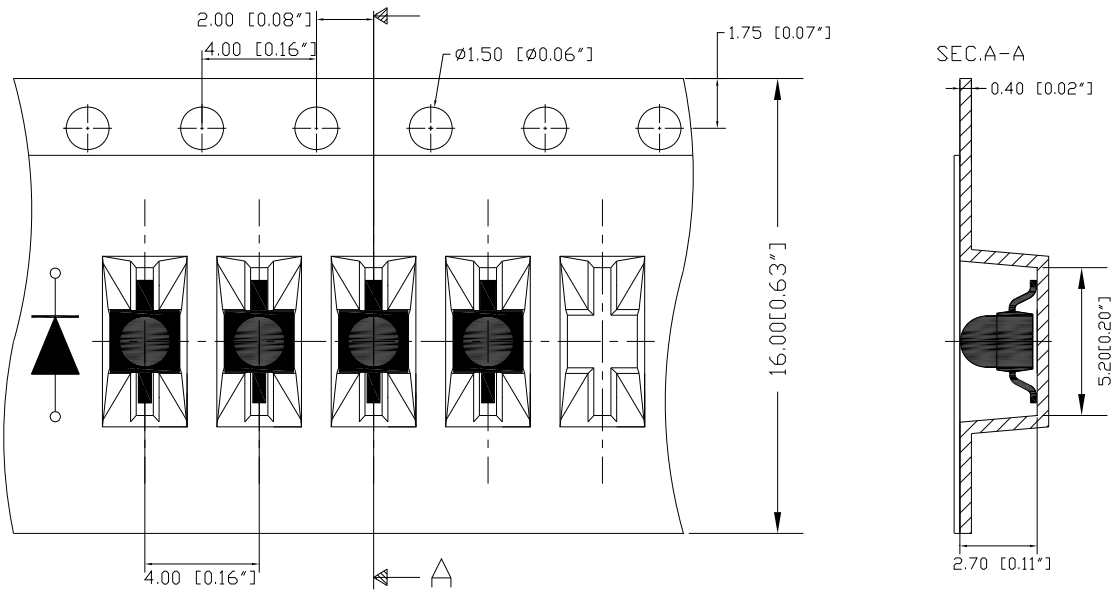
● Feeding Direction




● Dimensions of Reel (Unit: mm)



● Dimensions of Tape (Unit: mm)




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SOLDERING CONDITIONS

RECOMMENDED Sn-PB IR-Reflow Soldering Profile



RECOMMENDED Pb-Free Soldering Profile



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