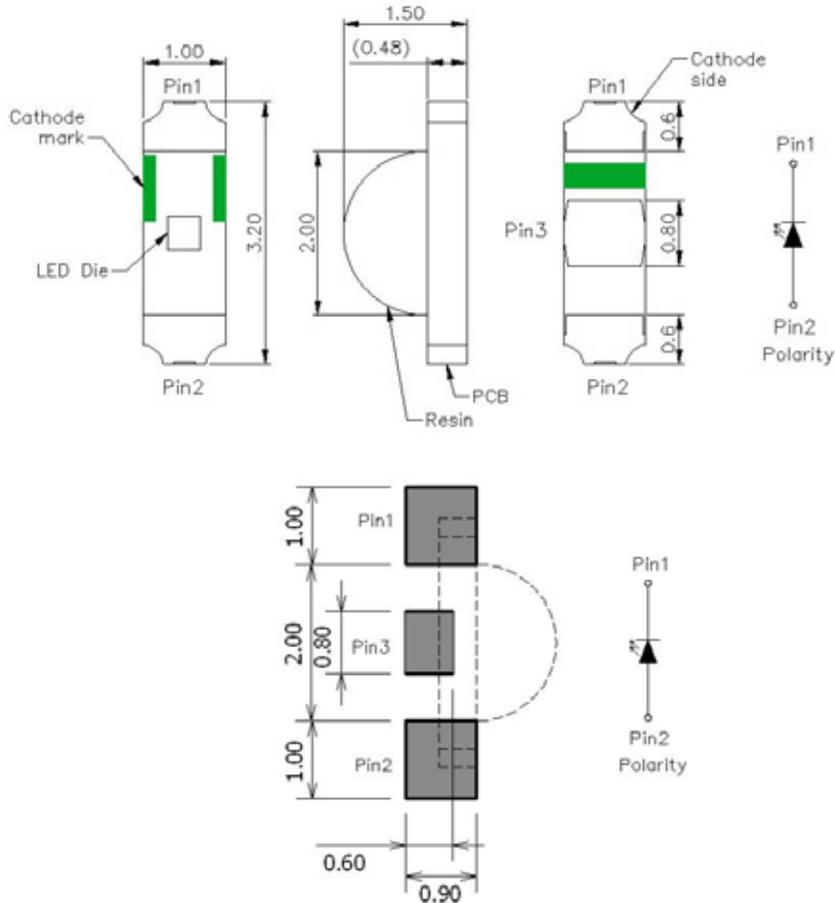


SPECIFICATION **CSR125IR850C**
PACKAGE OUTLINES


- 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
CSR125IR850C	AlGaAs	Infrared	Water Clear	140°



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

Parameter	Symbol	Max Rating	Unit
Forward Current	I _F	200	mA
Reverse Current @ 5V	I _R	10	μA
Power Dissipation	P _d	80	mW
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}	100	mA
Soldering Temperature	T _{SOL}	Max 260°C for 5 sec Max	

OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

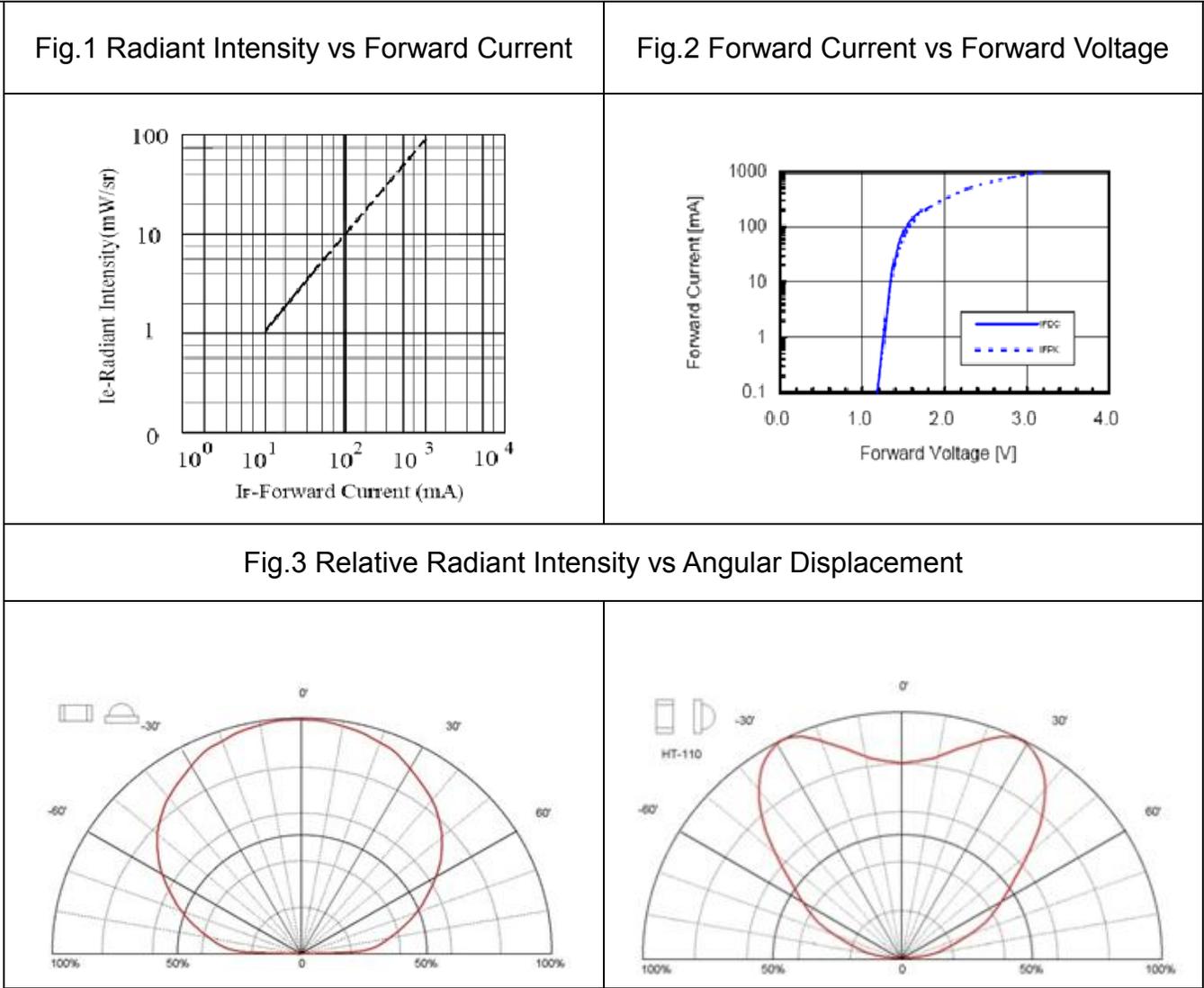
Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	I _v	I _F = 100mA	3	5	-	mW/sr
Forward Voltage	V _F	I _F = 100mA	-	1.8	2.3	V
Reverse Leakage Current	I _R	V _R = 5V	-	-	10	μA
Viewing Angle at 50% I _v	2θ _{1/2}	I _F = 100mA	-	140	-	Deg
Peak Wavelength	λ _P	I _F = 100mA	-	850	-	nm
Spectral Bandwidth	Δλ	I _F = 100mA	-	40	-	nm

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



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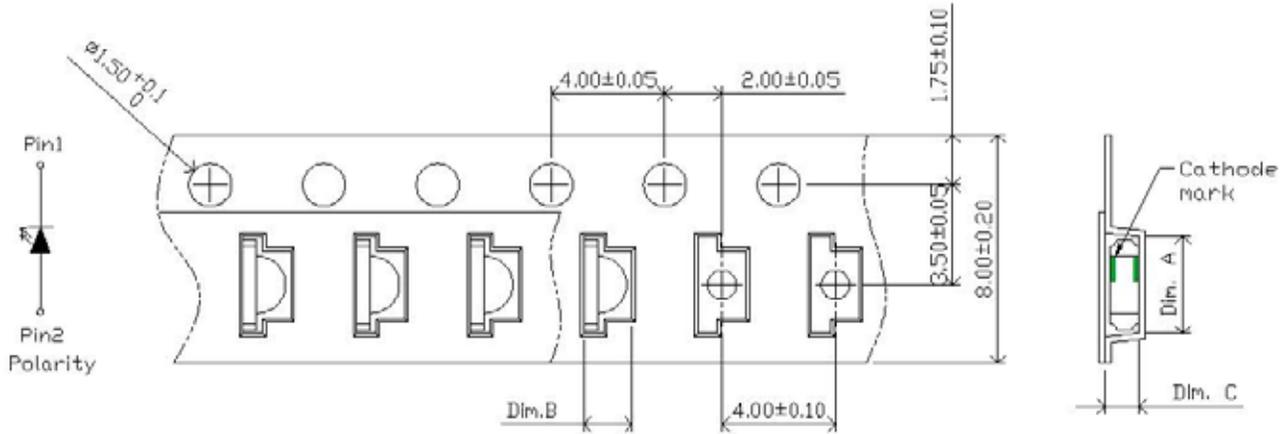
OPTICAL CHARACTERISTIC CURVES



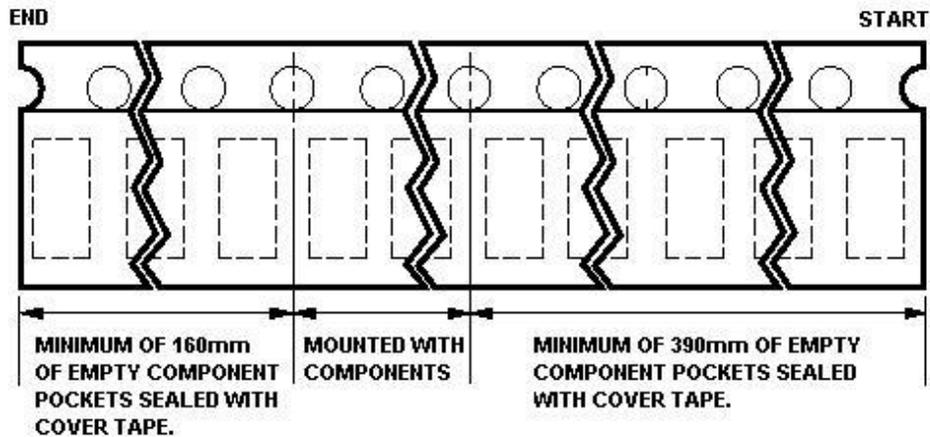
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PACKAGING SPECIFICATION

Packaging Tape Dimension



Dim. A	Dim. B	Dim. C	Q'ty/Reel
3.40±0.10	1.70±0.10	1.20±0.10	3K



Notes:
1. 3000 pieces per reel.



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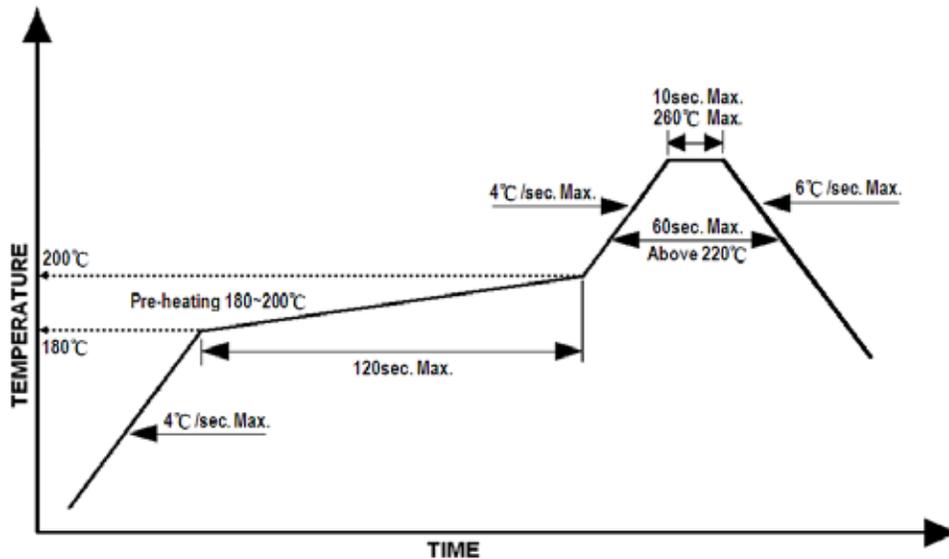
SOLDERING CONDITIONS

Reflow Soldering

Recommend soldering paste specifications:

1. Operating temp.: Above 220 °C ,60 sec.
2. Peak temp.:260 °C Max.,10sec Max.
3. Reflow soldering should not be done more than two times.
4. Never attempt next process until the component is cooled down to room temperature after reflow.
5. The recommended reflow soldering profile (measured on the surface of the LED terminal) is as following:

Lead-free Solder Profile



Reworking

- Rework should be completed within 5 seconds under 260°C.
- The iron tip must not come in contact with the copper foil.
- Twin-head type is preferred.

Cleaning

Following are cleaning procedures after soldering:

- An alcohol-based solvent such as isopropyl alcohol (IPA) is recommended.
- Temperature x Time should be 50°C x 30sec. or <30°C x 3min
- Ultrasonic cleaning: < 15W/ bath; bath volume ≤ 1liter
- Curing: 100°C max, <3min



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