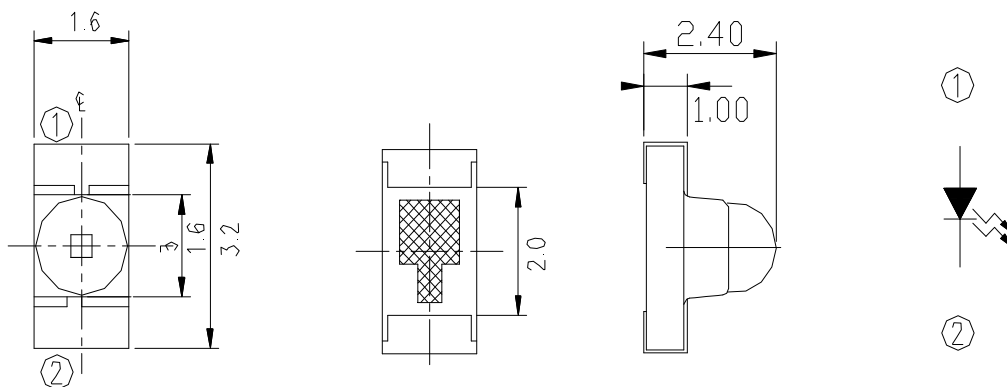


**Features**

- IR LED
- Wide Range Of Collector Current
- Lensed for high sensitivity.
- Low cost plastic side looking package.
- Clear transparent color package.
- Meet ROHS Green Product

**Applications**

- Emitter

**Package Dimensions****Notes:**

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}$  (.01") unless otherwise noted.
3. Specifications are subject to change without notice
4. This drawing is only for reference, not as a basis for the actual structure.

**Selection Guide**

Part No	Lens Type	Dice	Emitted Color
FDI-3216240E940-SC50ZPR	Water Clear	-	-

**Electrical / Optical Characteristics At Ta=25°C**

Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Condition
I <sub>E</sub>	Radiant Intensity		3.5		mw/sr	IF=20mA
2θ <sub>1/2</sub>	Viewing Angle		50		deg	IF=20mA
λ <sub>Peak</sub>	Peak Emission Wavelength		940		nm	IF=20mA
Δλ	Spectral Line Half-Width		50		nm	IF=20mA
V <sub>F</sub>	Forward Voltage		1.4	1.7	V	IF=20mA
I <sub>R</sub>	Reverse Current			10	uA	VR 5V

**Absolute Maximum Ratings At Ta=25°C**

Parameter	Maximum Rating	Unit
Power Dissipation	100	mW
Peak Forward Current[1]	1	A
Continuous Forward Current	50	mA
Reverse Voltage	5	V
Operating Temperature Range	-20°C to + 80°C	
Storage Temperature Range	-30°C to + 100°C	
Soldering Condition	260°C For 5 Seconds	

Note:

1. 1/10 Duty Cycle, 10 μ s PulseWidth

**Electrical Optical Characteristics Curves At Ta=25°C**

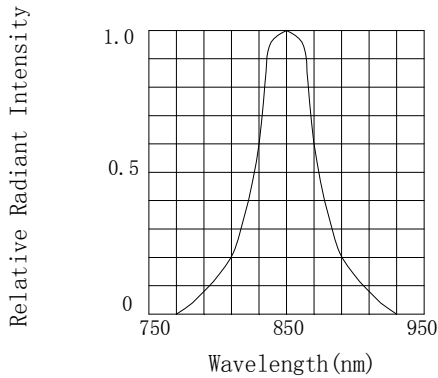


Fig. 1 Spectral Distribution

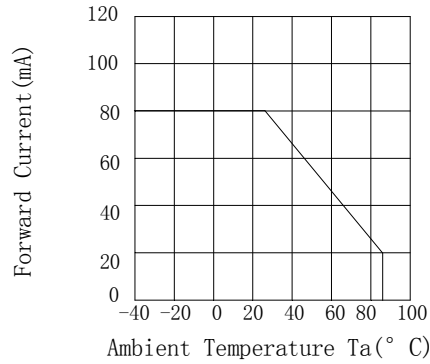


Fig. 2 Forward Current VS. Ambient Temperature

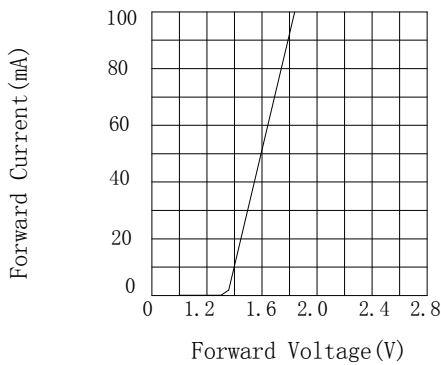


Fig. 3 Forward Current VS. Forward Voltage

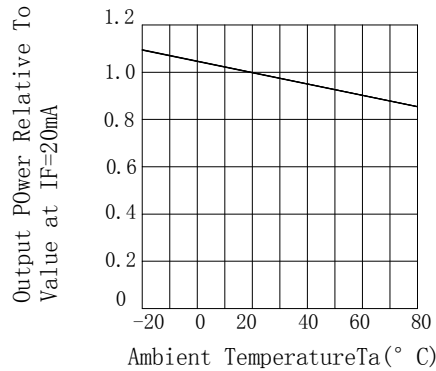


Fig. 4 Relative Radiant Intensity VS. Ambient Temperature

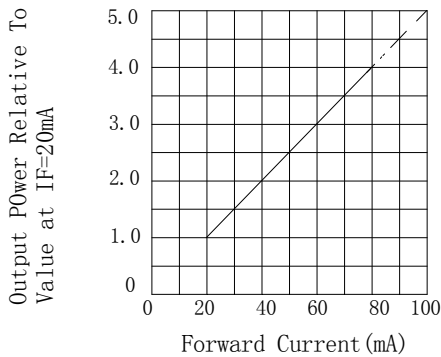


Fig. 5 Relative Radiant Intensity VS. Forward Current

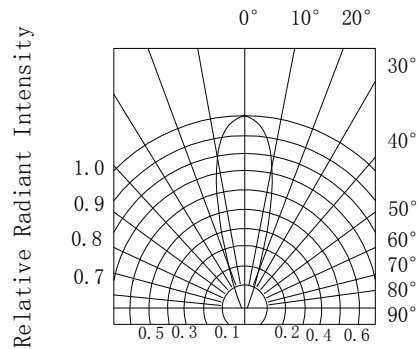
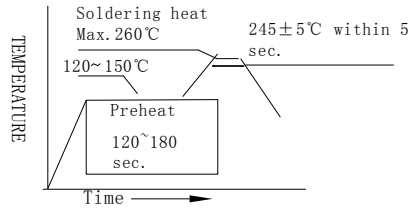


Fig. 6 Radiation Diagram

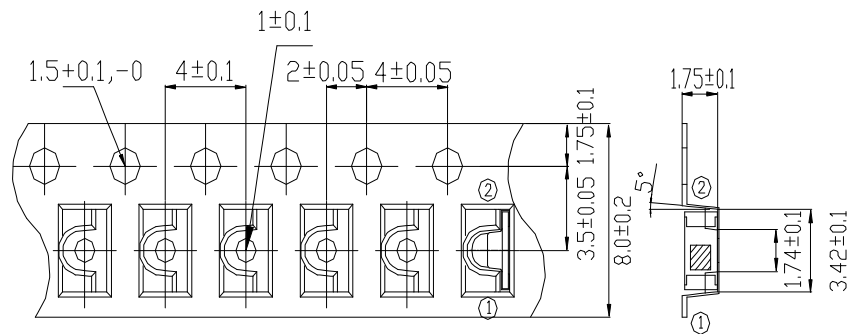
### SMT Reflow Soldering Instructions



Notes:

1. Sells gives no other assurances regarding the ability of to withstand ESD. It is recommended to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.
2. Reflow soldering should not be done more than two times.
3. Do not stress LED when soldering, and do not warp the circuit board after soldering
4. While using Iron, Power dissipation of Iron should be smaller than 25W, and temperature should be controllable. The work should be finished within 2 sec under 320°C for once only.

### Package Specifications (Units: mm (inches))



Notes:

1. The LEDs should be used within a year.
2. The LEDs should be kept in 5~30°C and 60% RH for less.
3. The LEDs should be used within 24 hours, or else should be kept a 5~30°C and 30% RH or less. And LEDs should be used within 7 days after opening the package.