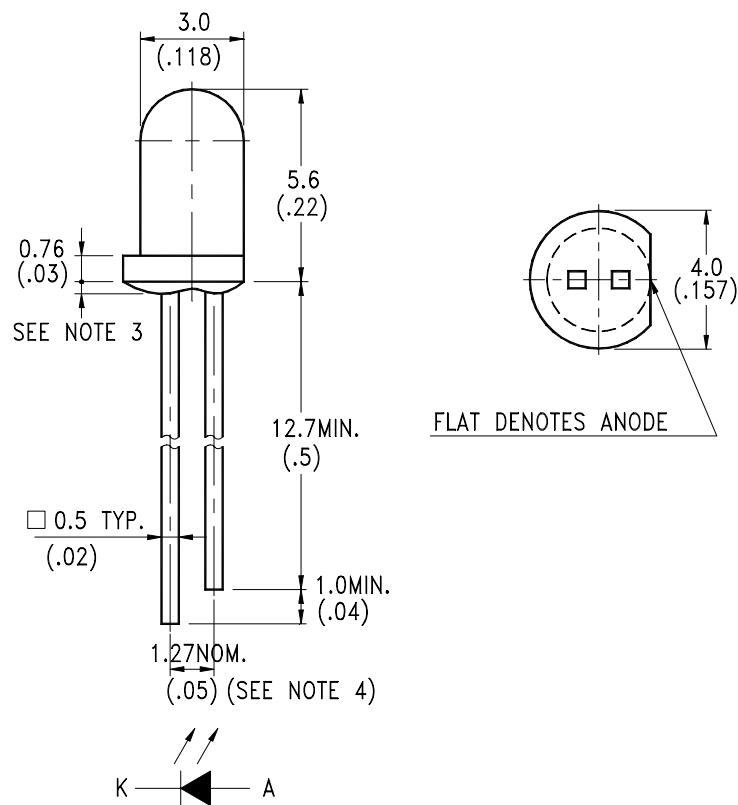


**FEATURES**

- \* SELECTED TO SPECIFIC ON-LINE INTENSITY AND RADIANT INTENSITY RANGES
- \* HIGH POWER OUT PUT
- \* MECHANICALLY AND SPECTRALLY MATCHED TO THE LTR-209 SERIES OF PHOTOTRANSISTOR
- \* SMOKING TRANSPARENT COLOR PACKAGE

**PACKAGE DIMENSIONS****NOTES:**

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}(.010\text{'})$  unless otherwise noted.
3. Protruded resin under flange is  $1.0\text{mm}(.039\text{'})$  max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.



# LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

## ABSOLUTE MAXIMUM RATINGS AT T<sub>A</sub>=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation	150	mW
Peak Forward Current (300pps, 10 $\mu$ s pulse)	2	A
Continuous Forward Current	100	mA
Reverse Voltage	5	V
Operating Temperature Range	-40°C to + 85°C	
Storage Temperature Range	-55°C to + 100°C	
Lead Soldering Temperature [1.6mm(.063") From Body]	260°C for 5 Seconds	

## ELECTRICAL OPTICAL CHARACTERISTICS AT T<sub>A</sub>=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Aperture Radiant Incidence	E <sub>e</sub>	0.44			mW/cm <sup>2</sup>	I <sub>F</sub> = 20mA
Radiant Intensity	I <sub>E</sub>	3.31			mW/sr	I <sub>F</sub> = 20mA
Peak Emission Wavelength	$\lambda_{Peak}$		880		nm	I <sub>F</sub> = 20mA
Spectral Line Half-Width	$\Delta \lambda$		50		nm	I <sub>F</sub> = 20mA
Forward Voltage	V <sub>F</sub>		1.3	1.8	V	I <sub>F</sub> = 20mA
Reverse Current	I <sub>R</sub>			100	$\mu$ A	V <sub>R</sub> = 5V
Viewing Angle (See FIG.6)	2 $\theta_{1/2}$		16		deg.	

## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

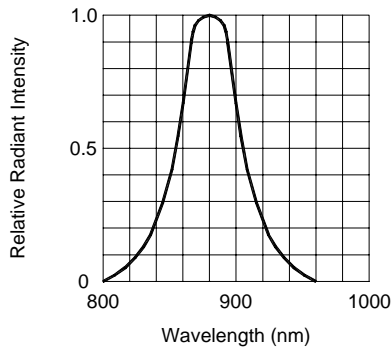


FIG.1 SPECTRAL DISTRIBUTION

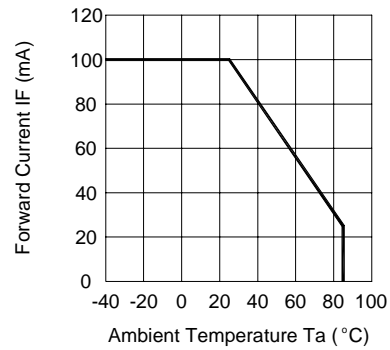


FIG.2 FORWARD CURRENT VS. AMBIENT TEMPERATURE

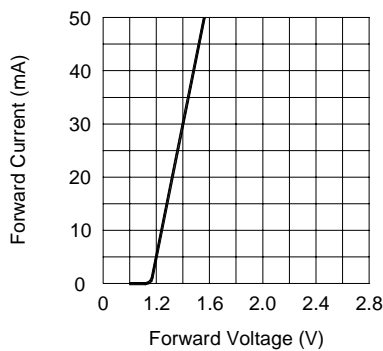


FIG.3 FORWARD CURRENT VS. FORWARD VOLTAGE

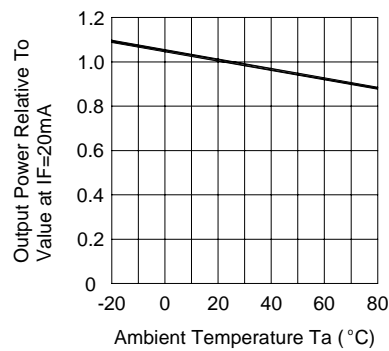


FIG.4 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

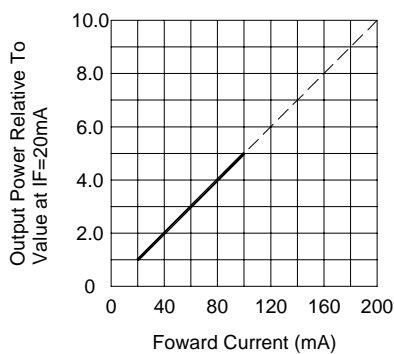


FIG.5 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

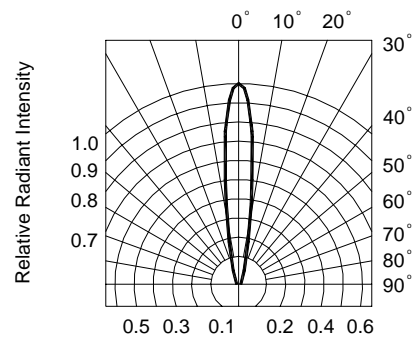


FIG.6 RADIATION DIAGRAM