



IR Emitter and Detector Product Data Sheet

LTE-4238R

Spec No.: DS-50-98-0043

Effective Date: 04/19/2000

Revision: C

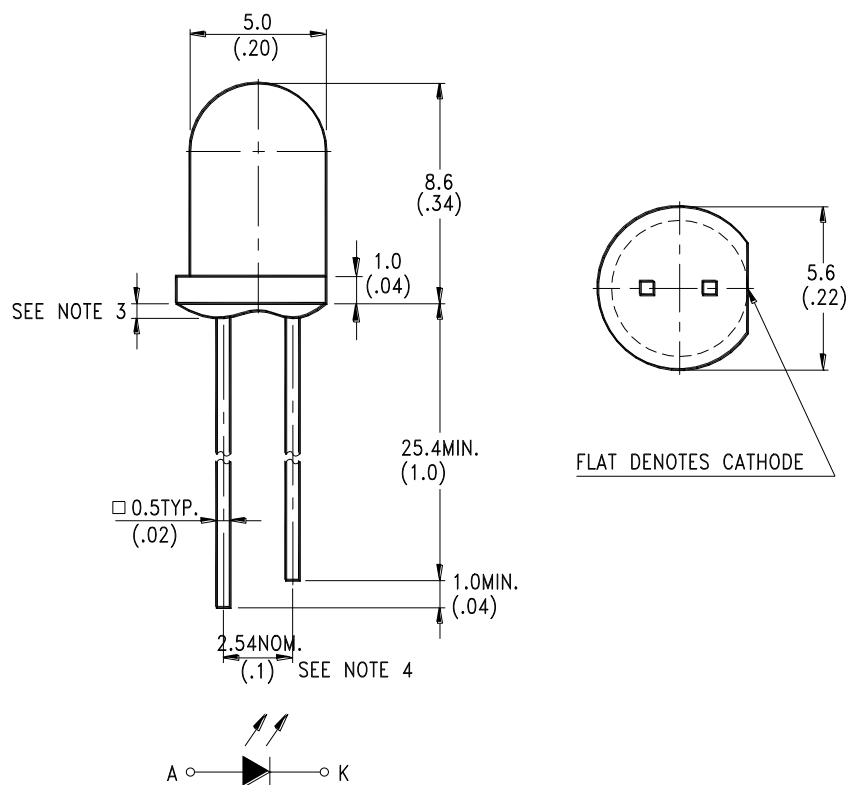
LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

FEATURES

- * SELECTED TO SPECIFIC ON-LINE INTENSITY AND RADIANT INTENSITY RANGES
- * LOW COST MINIATURE PLASTIC END LOOKING PACKAGE
- * MECHANICALLY AND SPECTRALLY MATCHED TO THE LTR-3208 SERIES OF PHOTOTRANSISTOR
- * CLEAR 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 for performance improvement.

ABSOLUTE MAXIMUM RATINGS AT TA=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation	150	mW
Peak Forward Current (300pps, 10 μ 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 TA=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Aperture Radiant Incidence	Ee	0.64			mW/cm ²	I _F = 20mA
Radiant Intensity	I _E	4.81			mW/sr	I _F = 20mA
Peak Emission Wavelength	λ_{Peak}		880		nm	I _F = 20mA
Spectral Line Half-Width	$\Delta \lambda$		50		nm	I _F = 20mA
Forward Voltage	V _F		1.3	1.8	V	I _F = 20mA
Reverse Current	I _R			100	μ A	V _R = 5V
Viewing Angle (See FIG.6)	$2\theta_{1/2}$		20		deg.	

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

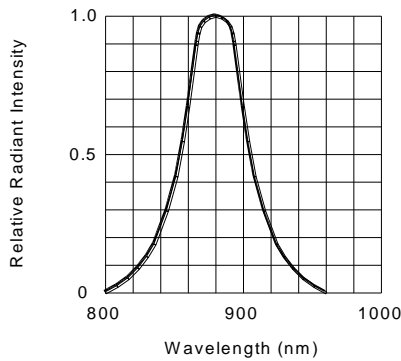


FIG.1 SPECTRAL DISTRIBUTION

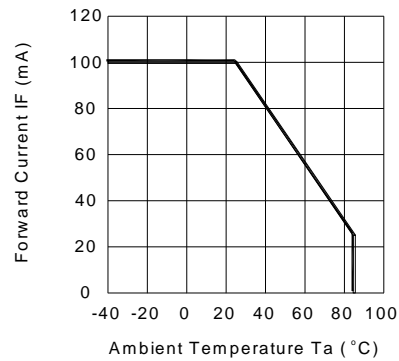


FIG.2 FORWARD CURRENT VS. AMBIENT TEMPERATURE

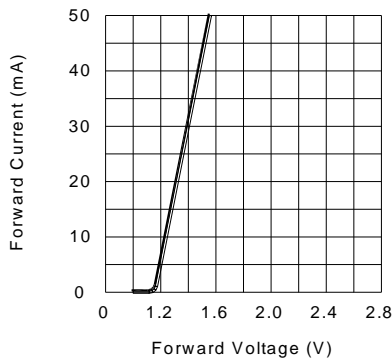


FIG.3 FORWARD CURRENT VS. FORWARD VOLTAGE

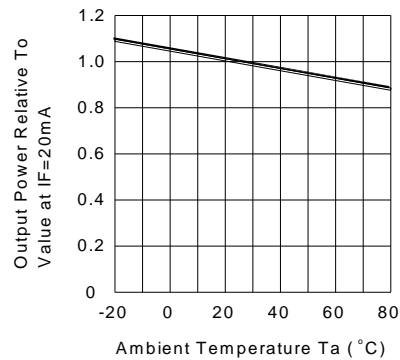


FIG.4 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

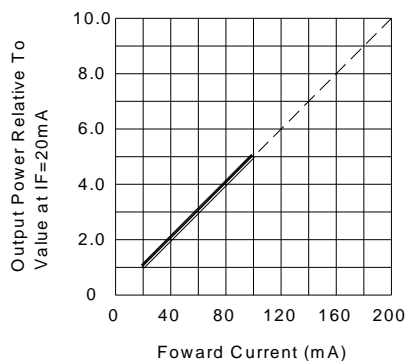


FIG.5 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

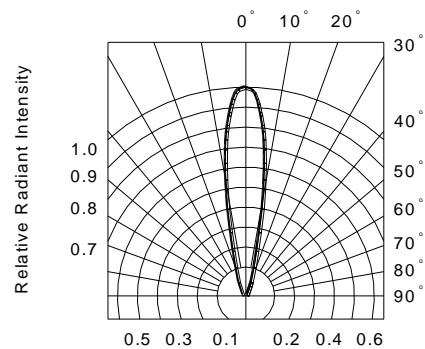


FIG.6 RADIATION DIAGRAM