



IR Emitter and Detector Product Data Sheet

LTE-3277

Spec No.: DS-50-99-0007

Effective Date: 02/15/2005

Revision: B

LITE-ON DCC

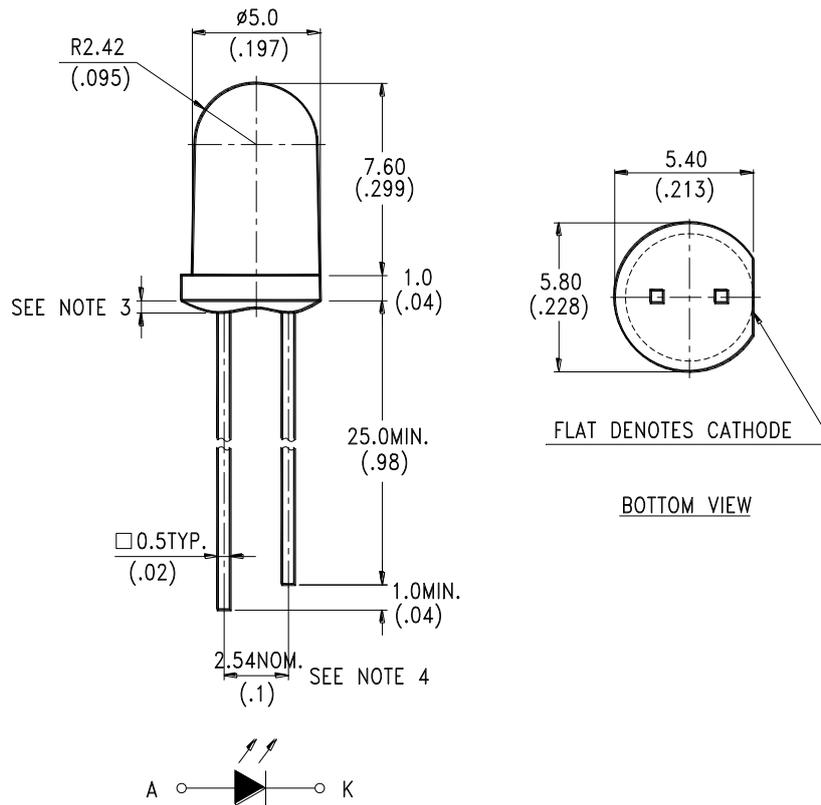
RELEASE

BNS-OD-FC001/A4

FEATURES

- * HIGH SPEED
- * HIGH POWER
- * AVAILABLE FOR PULSE OPERATING
- * 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 $1.5\text{mm}(.059\text{'})$ max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.

ABSOLUTE MAXIMUM RATINGS AT TA=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation	120	mW
Peak Forward Current (300pps, 10 μ s pulse)	1	A
Continuous Forward Current	100	mA
Reverse Voltage	5	V
Operating Temperature Range	-40°C to + 85°C	
Storage Temperature Range	-40°C to + 85°C	
Lead Soldering Temperature [1.6mm(.063") From Body]	260°C for 6 Seconds	

ELECTRICAL / OPTICAL CHARACTERISTICS AT TA=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Radiant Intensity	I_E	20	36	-	mW/sr	$I_F = 20mA$
Peak Emission Wavelength	λ_P	-	865	-	nm	$I_F = 20mA$
Spectral Line Half-Width	$\Delta \lambda$	-	25	-	nm	$I_F = 20mA$
Forward Voltage	V_F	-	1.45	1.65	V	$I_F = 20mA$
Forward Voltage	ΔV_F	-	-	0.4	V	$V_F@ 50mA - V_F@ 20mA$
Reverse Current	I_R	-	-	10	μA	$V_R = 5V$
Reverse Voltage	V_R	5	-	-	V	$I_R = 100 \mu A$
Viewing Angle (See FIG.6)	$2\theta_{1/2}$	25	30	-	deg.	$I_F = 20mA$
Dice Center	-	0	-	0.12	mm	-

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

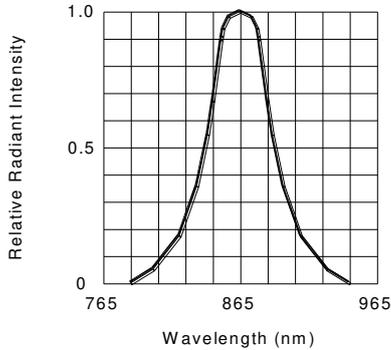


FIG.1 SPECTRAL DISTRIBUTION

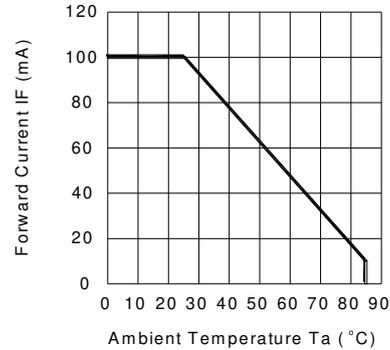


FIG.2 FORWARD CURRENT VS. AMBIENT TEMPERATURE

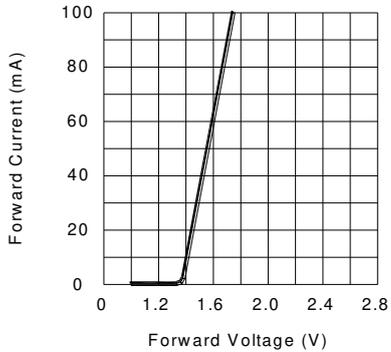


FIG.3 FORWARD CURRENT VS. FORWARD VOLTAGE

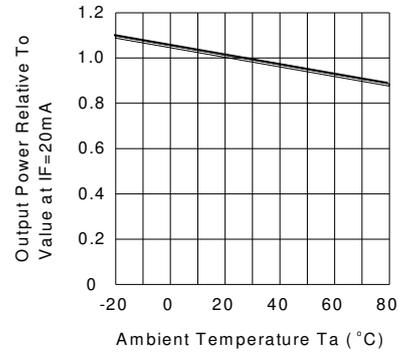


FIG.4 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

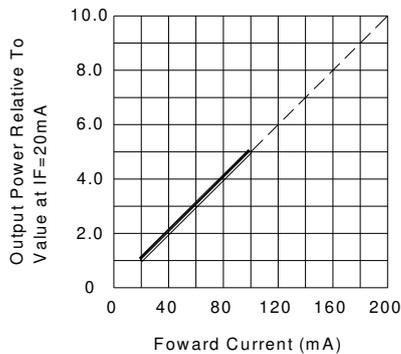


FIG.5 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

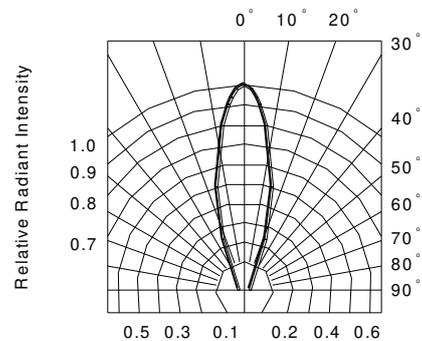


FIG.6 RADIATION DIAGRAM