

62111

LIGHT EMITTING DIODE "PIGTAIL"



09/22/03

Features:

- Hermetically sealed
- High output, 850nm
- Small package
- PC board mountable

Applications:

- Incremental encoding
- Reflective sensors
- Position sensors
- Level sensors

DESCRIPTION

The **62111** is a P-N GaAs Infrared Light Emitting Diode in a lensed coaxial package designed to be mounted in a single-clad printed circuit board. It is spectrally and mechanically matched to companion phototransistors and photodarlington with its narrow beam angle lens and small size which make it ideal for use in optical encoders, card reader arrays, etc. This device is also available with a lead attached to the case so that it may be connected without the use of a printed board. Available binned to customer specifications and/or screened to MIL-PRF-19500.

ABSOLUTE MAXIMUM RATINGS

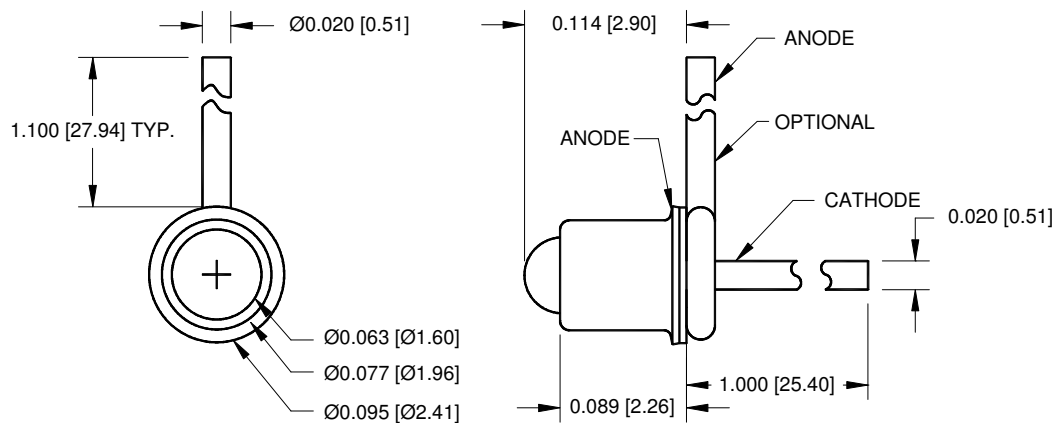
Reverse Voltage.....	3 Vdc
Forward Current-Continuous (at 25°C case temperature)..(Note 1)	100 mA
Storage Temperature	-65°C to +150°C
Operating Temperature	-55°C to +125°C
Soldering Temperature (10 seconds, 1/16" from case)	240°C

NOTES:

1. Derate linearly to 125°C free-air temperature at the rate of 1mA/°C.

Package Dimensions

Schematic Diagram



ALL DIMENSIONS ARE IN INCHES [MILLIMETERS]

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ELECTRICAL CHARACTERISTICS

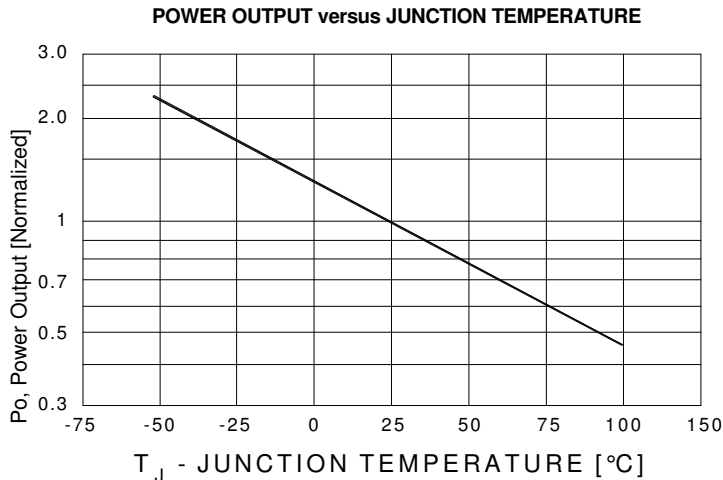
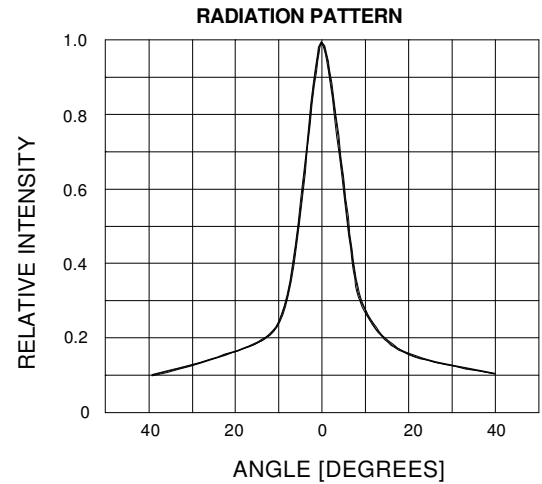
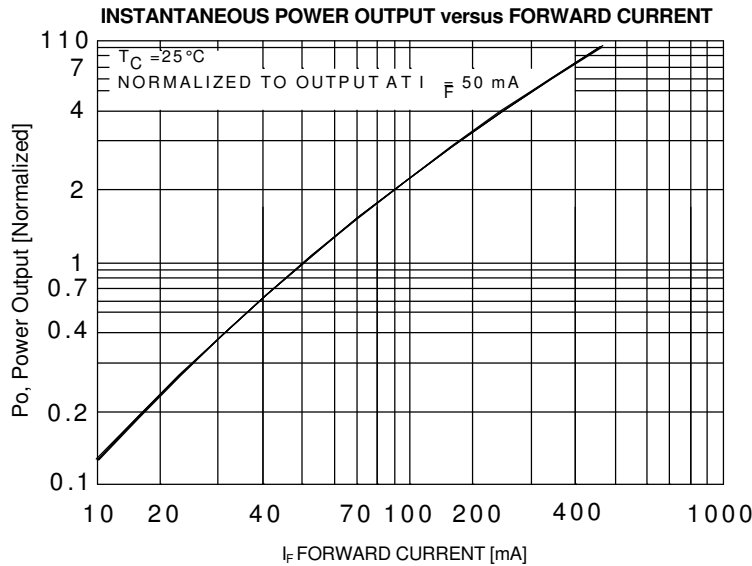
T_A = 25°C unless otherwise specified.

LIGHT-EMITTING DIODE "PIGTAIL"

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS	NOTE
Output Power	P _O	1.0			mW	I _F = 20mA	
Forward Voltage	V _F			1.8	V	I _F = 50mA	
Reverse Breakdown Voltage	B _{VR}	6			V	I _R = 8μA	
Radiation Rise Time	t _R		30		μs		
Peak Wavelength	λ _P		850		nm	I _F = 50mA	
Beam Angle	θ		12		degrees		1
Forward Max Continuous Current	I _{F(MAX)}			100	mA	25°C Case	

NOTES:

- Angle between half-intensity points.



RECOMMENDED OPERATING CONDITIONS:

PARAMETER	SYMBOL	MIN	MAX	UNITS
Forward Current	I _F	50	100	mA

SELECTION GUIDE

PART NUMBER	PART DESCRIPTION	P _O Range, MIN
62111-001	Pig tail, Commercial	1 mW
62111-001L	Loop Lead, Commercial	1 mW
62111-101	Pig tai, Screened	1 mW
62111-101L	Loop Lead, Screened	1 mW