62087 HIGH OUTPUT 850 nm LIGHT EMITTING DIODE "PILL PACK"

10/05/06

Features:	**Applications**
• Hermetically sealed • 850 nm • Small package • PC board mountable	• Incremental encoding • Reflective sensors • Position sensors • Level sensors

DESCRIPTION

The ***62087*** is a high output 850 nm Infrared Light Emitting Diode in a lensed "pill" package designed to be mounted in a double-clad printed circuit board. With it's narrow beam angle lens and small size which make it ideal for use in optical encoders, card reader arrays, etc. Available as a commercial device or screened to methods of MIL-PRF-19500.

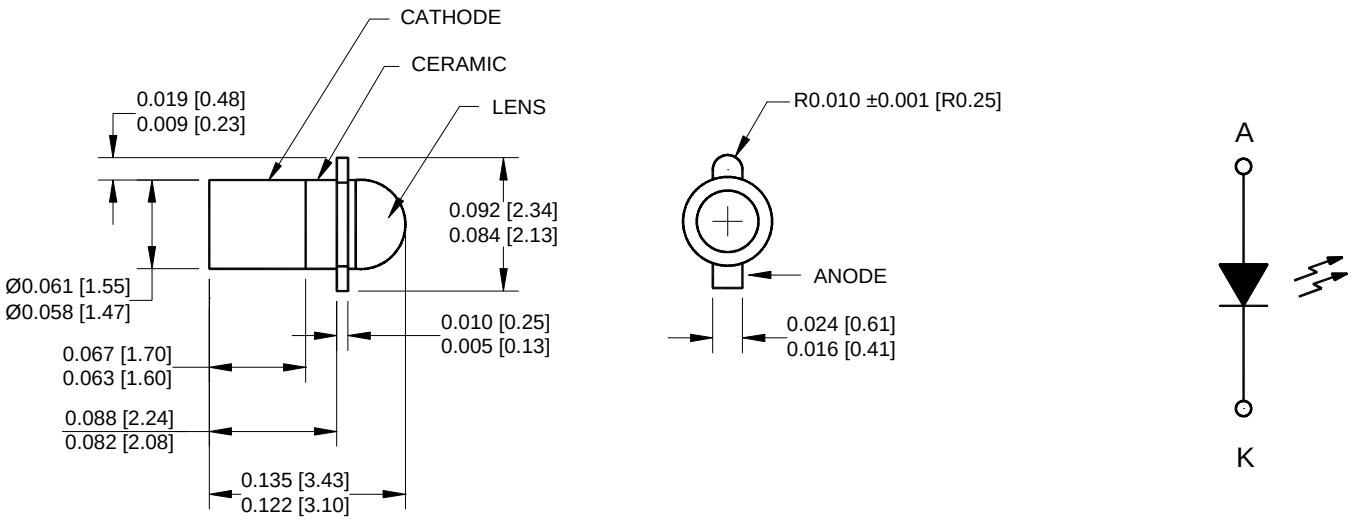
ABSOLUTE MAXIMUM RATINGS

Reverse Voltage (at 25°C case temperature) ..... 5 Vdc
Forward Current-Continuous (Note 1) (at 25°C case temperature) ..... 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 case temperature at the rate of 1mA/°C above 25°C.

Package Dimensions **Schematic Diagram**



ALL DIMENSIONS ARE IN INCHES [MILLIMETERS]

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ELECTRICAL CHARACTERISTICS

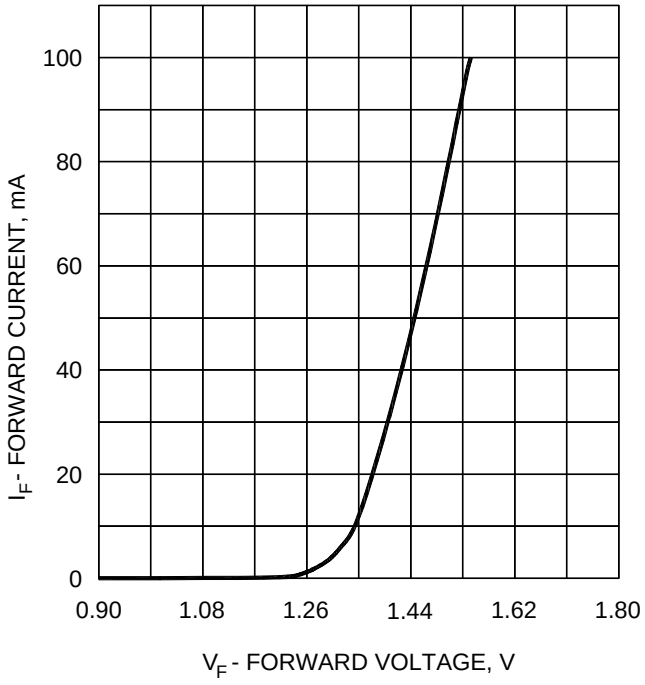
T_A = 25°C unless otherwise specified.

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS	NOTE
Output Power	P_O	1.8			mW	I_F = 50mA	
Forward Voltage	V_F			1.8	V	I_F =50mA	
Reverse Breakdown Voltage	B_{VR}	5			V	I_B = 10μA	
Rise Time	t_R	38			ns	I_F =50mA	
Fall Time	t_F	15			ns	I_F =50mA	
Peak Wavelength	λ_P		850		nm	I_F =50mA	
Beam Angle	θ		20		degrees		1
Forward Max Continuous Current	$I_{F(MAX)}$			100	mA	25°C Case	

NOTES:

1. Angle between half-intensity points.

FORWARD VOLTAGE
vs
FORWARD CURRENT



RECOMMENDED OPERATING CONDITIONS:

PARAMETER	SYMBOL	MIN	MAX	UNITS
Forward Current	I_F		50	mA

SELECTION GUIDE

PART NUMBER	PART DESCRIPTION
62087-001	Commercial
62087-101	Screened

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