

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



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**Features:**

- Hermetically sealed
- 850 nm
- Small package
- PC board mountable

**Applications**

- 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 its 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**

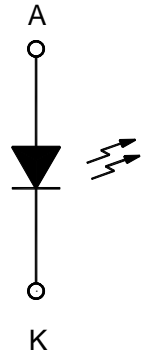
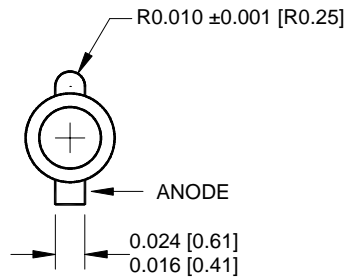
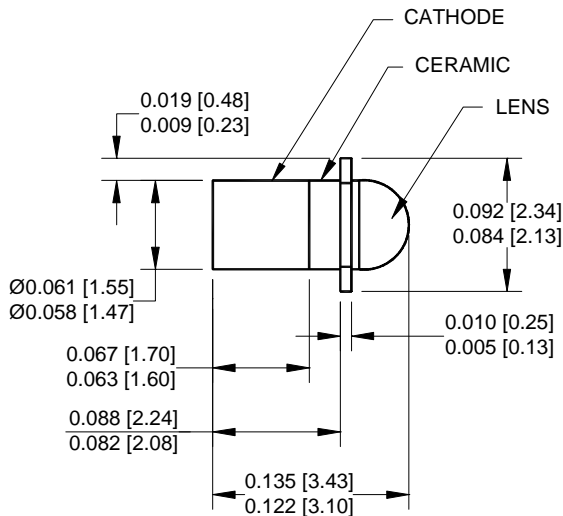
Reverse Voltage (at 25°C case temperature) .....	5 Vdc
Forward Current-Continuous (Note 1) (at 25°C case temperature).....	100 mA
Storage Temperature.....	-65°C to +150°C
Operating Temperature .....	-55°C to +125°C
Soldering Temperature (10 seconds, 1/16" from case) .....	240°C

**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**

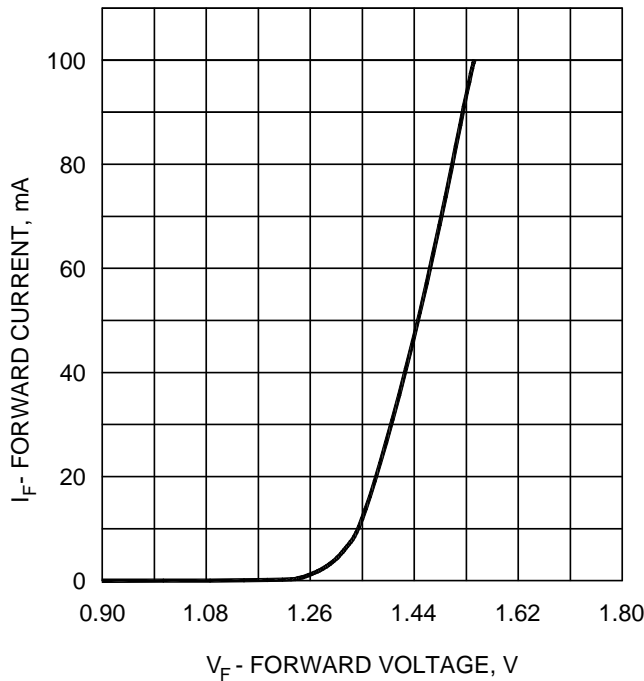
T<sub>A</sub> = 25°C unless otherwise specified.

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS	NOTE
Output Power	P <sub>O</sub>	1.8			mW	I <sub>F</sub> = 50 mA	
Forward Voltage	V <sub>F</sub>			1.8	V	I <sub>F</sub> = 50 mA	
Reverse Breakdown Voltage	B <sub>VR</sub>	5			V	I <sub>B</sub> = 10 μA	
Rise Time	t <sub>R</sub>	38			ns	I <sub>F</sub> = 50 mA	
Fall Time	t <sub>F</sub>	15			ns	I <sub>F</sub> = 50 mA	
Peak Wavelength	λ <sub>P</sub>		850		nm	I <sub>F</sub> = 50 mA	
Beam Angle	θ		20		degrees		1
Forward Max Continuous Current	I <sub>F(MAX)</sub>			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 <sub>F</sub>		50	mA

**SELECTION GUIDE**

PART NUMBER	PART DESCRIPTION
62087-001	Commercial
62087-101	Screened to JANTX level
62087-105	Screened to JANTXV level
62087-301	Screened to JANS level