

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



08/12/2009

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 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

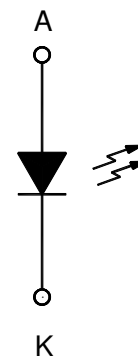
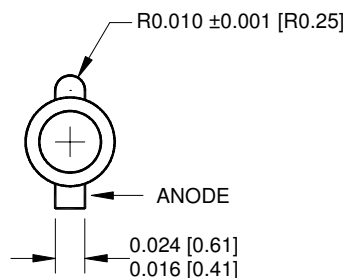
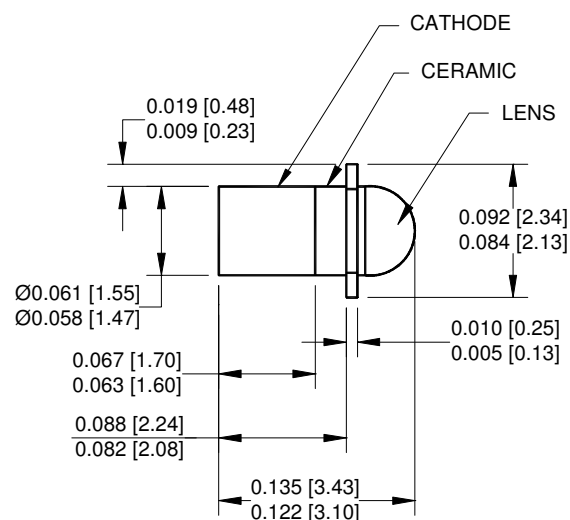
Reverse Voltage (at 25 °C case temperature)	5 Vdc
Forward Current-Continuous (Note 1) (at 25 °C case temperature)	100 mA
Storage Temperature	-65 °C to +150 °C
Operating Temperature	-55 °C to +125 °C
Soldering Temperature (10 seconds, 1/16" from case)	240 °C

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]

62087

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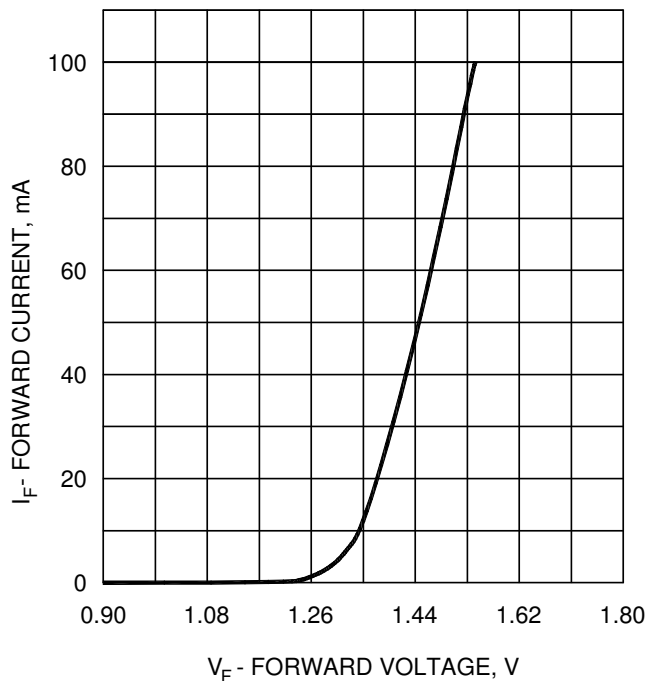
HIGH OUTPUT 850 nm LIGHT EMITTING DIODE "PILL PACK"**ELECTRICAL CHARACTERISTICS** $T_A = 25^\circ\text{C}$ unless otherwise specified.

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS	NOTE
Output Power	P_O	1.8			mW	$I_F = 50\text{ mA}$	
Forward Voltage	V_F			1.8	V	$I_F = 50\text{ mA}$	
Reverse Breakdown Voltage	B_{VR}	5			V	$I_B = 10\text{ }\mu\text{A}$	
Rise Time	t_R	38			ns	$I_F = 50\text{ mA}$	
Fall Time	t_F	15			ns	$I_F = 50\text{ mA}$	
Peak Wavelength	λ_P		850		nm	$I_F = 50\text{ mA}$	
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 to JANTX level
62087-105	Screened to JANTXV level
62087-301	Screened to JANS level