

# 62005 GaAlAs LIGHT EMITTING DIODE "PILL PACK"



05/29/03

### Features:

- Hermetically sealed
- High output, 880nm
- Small package
- PC board mountable

### Applications:

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

## DESCRIPTION

The **62005** is a GaAlAs Infrared Light Emitting Diode in a package designed to be mounted in a double-clad printed circuit board. GaAlAs offers significantly higher power out than GaAs LED's at equivalent drive current and it's 880nm wavelength closely matches the peak response of silicon. It is spectrally and mechanically matched to companion phototransistors and photodarlington and is lensed to provide good light transfer and to minimize crosstalk. Available binned to customer specifications and/or screened to MIL-PRF-19500.

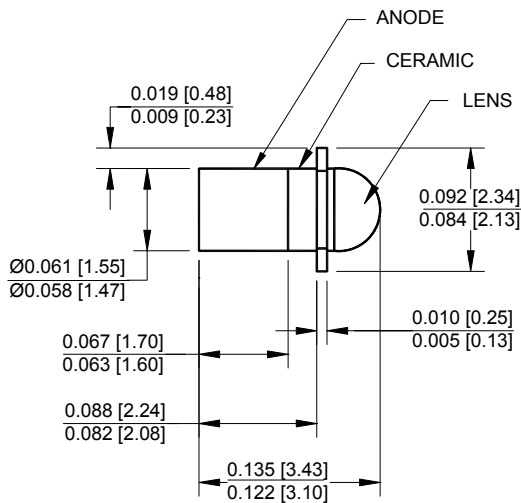
## ABSOLUTE MAXIMUM RATINGS

Storage Temperature.....	-65°C to +150°C
Operating Temperature .....	-55°C to +125°C
Reverse Voltage .....	2Vdc
Forward Current – Continuous .....	(See note 1) (at 25°C case temperature) ..... 100mA
Soldering Temperature (10 Seconds).....	240°C

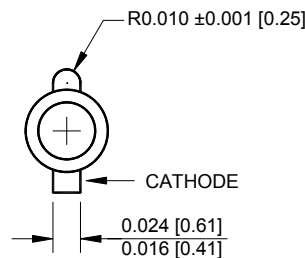
### NOTES:

1. Derate linearly to 125°C case temperature at the rate of 1mA/°C above 25°C.

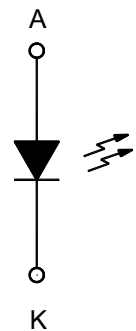
### Package Dimensions



ALL DIMENSIONS ARE IN INCHES [MILLIMETERS]



### Schematic Diagram



# 62005

05/29/03

## ELECTRICAL CHARACTERISTICS

## GaAlAs LIGHT-EMITTING DIODE "PILL PACK"

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

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS	NOTE
Output Power	62005-X01 62005-X02 62005-X03 62005-X04	0.5 1 1.4 1.9			mW	I <sub>F</sub> = 50mA	
Forward Voltage	62005-X0X			1.7	V	I <sub>F</sub> = 50mA	
Reverse Breakdown Voltage	62005-X0X	2			V	I <sub>R</sub> = 10μA	
Radiation Rise Time	62005-X0X		0.7		μs		
Peak Wavelength	62005-X0X		880		nm	I <sub>F</sub> = 50mA	
Beam Angle	62005-X0X		20		degrees		

### SELECTION GUIDE

PART NUMBER	PART DESCRIPTION	P <sub>O</sub> MIN.
62005-001	Commercial	0.5 mW
62005-101	Screened	0.5 mW
62005-002	Commercial	1mW
62005-102	Screened	1 mW
62005-003	Commercial	1.4 mW
62005-103	Screened	1.4 mW
62005-004	Commercial	1.9 mW
62005-104	Screened	1.9 mW