

62086

LIGHT EMITTING DIODE



04/25/07

Features:

- Hermetically sealed
- High output, 850nm
- Small package
- Spectrally matched to the 61050 series detector

Applications:

- End-of-tape indicators
- Reflective sensors
- Card readers
- Level sensors

DESCRIPTION

The **62086** is an Infrared Light Emitting Diode in a dome lens TO-46 package. The output is spectrally matched to silicon phototransistors or photodarlington. Available binned to customer specifications and/or screened to MIL-PRF-19500.

ABSOLUTE MAXIMUM RATINGS 25°C FREE AIR TEMPERATURE UNLESS NOTED

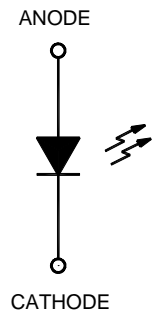
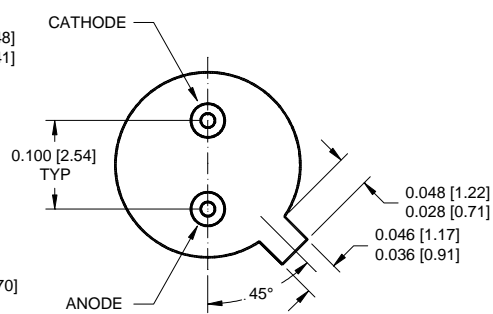
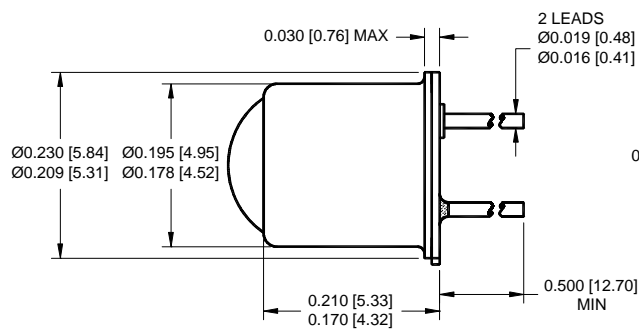
Reverse Voltage(at 25°C case temperature)	5Vdc
Forward Current-Continuous (Note 1)	60mA
Storage Temperature	-65°C to +150°C
Operating Temperature.....	-55°C to +125°C
Soldering Temperature (10 seconds, 1/16" from case)	240°C

NOTES:

1. Derate linearly to 125°C case temperature at the rate of 0.6 mA/°C.

Package Dimensions

Schematic Diagram



THE CATHODE IS IN ELECTRICAL CONTACT WITH THE CASE.

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			mW	I _F = 20mA	
Forward Voltage	V _F			1.8	V	I _F = 20mA	
Reverse Breakdown Voltage	B _{VR}	5			V	I _R = 10μA	
Rise Time	t _R	38			ns	I _F = 50mA	
Fall Time	t _F	15					
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.

RECOMMENDED OPERATING CONDITIONS:

PARAMETER	SYMBOL	MIN	MAX	UNITS
Forward Current	I _F		50	mA

SELECTION GUIDE

PART NUMBER	PART DESCRIPTION
62086-001	Commercial
62086-101	Screened