

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

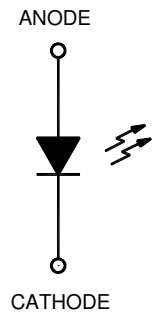
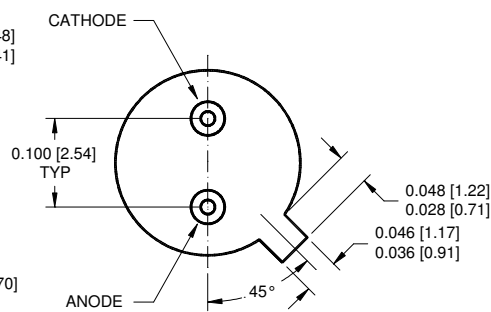
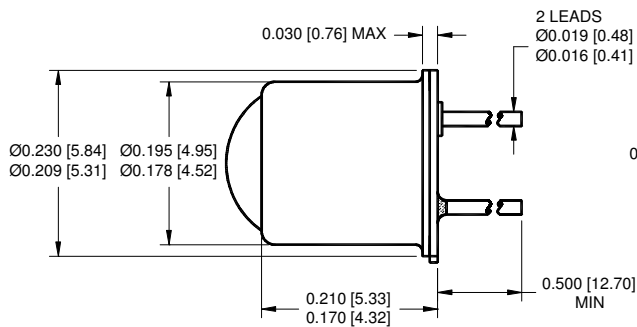
Reverse Voltage(at 25 °C case temperature)	5Vdc
Forward Current-Continuous (Note 1)	60mA
Storage Temperature	-65 °C to +150 °C
Operating Temperature.....	-55 °C to +125 °C
Soldering Temperature (10 seconds, 1/16" from case)	240 °C

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]

62086**LIGHT-EMITTING DIODE**

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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			mW	$I_F = 20\text{mA}$	
Forward Voltage	V_F			1.8	V	$I_F = 20\text{mA}$	
Reverse Breakdown Voltage	B_{VR}	5			V	$I_R = 10\mu\text{A}$	
Rise Time	t_R	38			ns	$I_F = 50\text{mA}$	
Fall Time	t_F	15					
Peak Wavelength	λ_P		850		nm	$I_F = 50\text{mA}$	
Beam Angle	θ		20		degrees		1
Forward Max Continuous Current	$I_{F(\text{MAX})}$			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