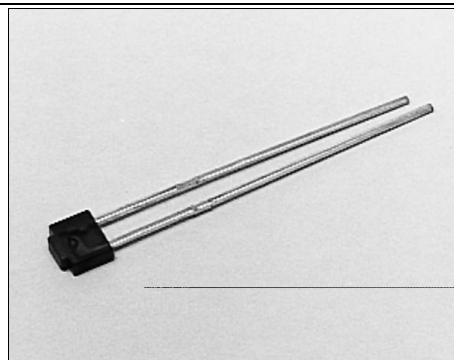


SEP8507

GaAs Infrared Emitting Diode

FEATURES

- End-emitting plastic package
- 135° (nominal) beam angle
- 935 nm wavelength
- Low profile for design flexibility
- Mechanically and spectrally matched to SDP8407 phototransistor



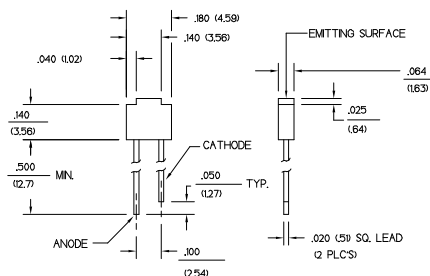
INFRA-18.TIF

DESCRIPTION

The SEP8507 is a gallium arsenide infrared emitting diode molded in an end-emitting red plastic package. The chip is positioned to emit radiation from the top of the package. Lead lengths are staggered to provide a simple method of polarity identification.

OUTLINE DIMENSIONS in inches (mm)

Tolerance	3 plc decimals	±0.008(0.20)
	2 plc decimals	±0.020(0.51)



DIM_009.cdr

SEP8507

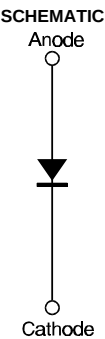
GaAs Infrared Emitting Diode

ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)						
PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Total Power Output SEP8507-001	P _O	0.40			mW	I _F =20 mA
Forward Voltage	V _F			1.5	V	I _F =20 mA
Reverse Breakdown Voltage	V _{BR}	3.0			V	I _R =10 μA
Peak Output Wavelength	λ _p		935		nm	
Spectral Bandwidth	Δλ		50		nm	
Spectral Shift With Temperature	Δλ _p /ΔT		0.3		nm/°C	
Beam Angle ⁽¹⁾	Ø		135		degr.	I _F =Constant
Radiation Rise And Fall Time	t _r , t _f		0.7		μs	

Notes
 1. Beam angle is defined as the total included angle between the half intensity points.

ABSOLUTE MAXIMUM RATINGS	
(25°C Free-Air Temperature unless otherwise noted)	
Continuous Forward Current	60 mA
Power Dissipation	100 mW ⁽¹⁾
Operating Temperature Range	-40°C to 85°C
Storage Temperature Range	-40°C to 85°C
Soldering Temperature (5 sec)	240°C

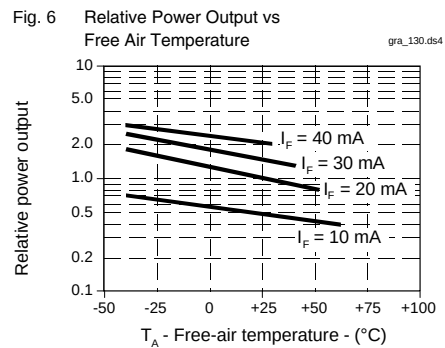
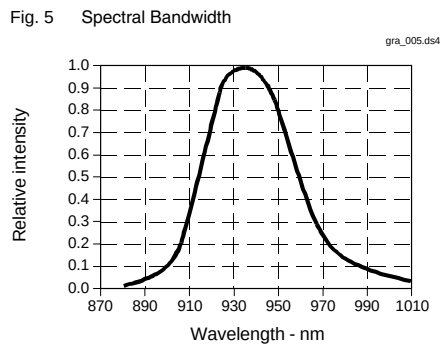
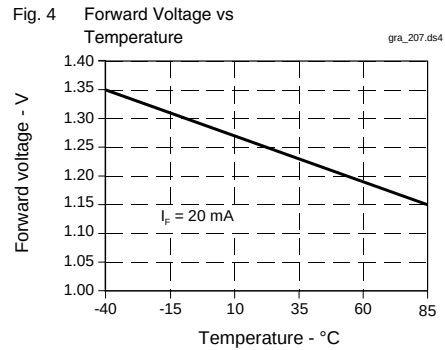
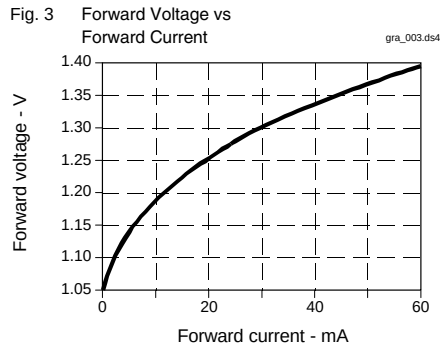
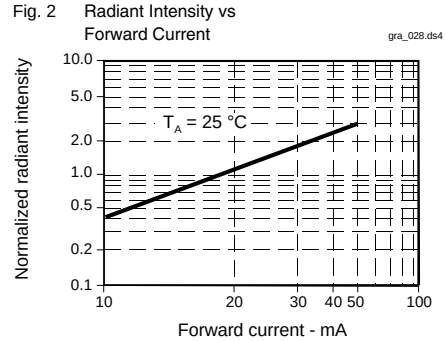
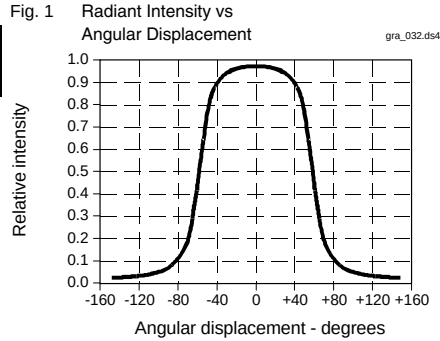
Notes
 1. Derate linearly from 25°C free-air temperature at the rate of 0.66 mW/°C.



Honeywell reserves the right to make changes in order to improve design and supply the best products possible.

SEP8507

GaAs Infrared Emitting Diode



All Performance Curves Show Typical Values

SEP8507

GaAs Infrared Emitting Diode



Honeywell reserves the right to make changes in order to improve design and supply the best products possible.

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