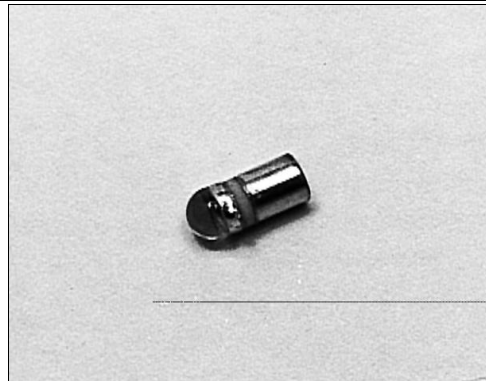


SE2460

GaAs Infrared Emitting Diode

FEATURES

- Miniature, hermetically sealed, pill style, metal can package
- 18° (nominal) beam angle
- Wide operating temperature range (- 55°C to +125°C)
- Ideal for direct mounting to printed circuit boards
- 935 nm wavelength
- Mechanically and spectrally matched to SD2420 photodiode, SD2440 phototransistor and SD2410 photodarlington



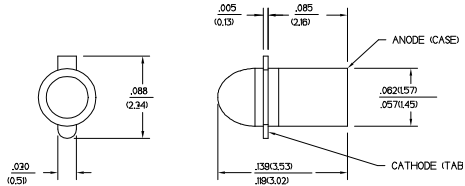
INFRA-1.TIF

DESCRIPTION

The SE2460 is a gallium arsenide infrared emitting diode mounted in a hermetically sealed, glass lensed, metal can package. This package directly mounts in double sided PC boards.

OUTLINE DIMENSIONS in inches (mm)

Tolerance 3 plc decimals $\pm 0.005(0.12)$
2 plc decimals $\pm 0.020(0.51)$



DIM_002.dwg

SE2460

GaAs Infrared Emitting Diode

ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Total Power Output	P_o				mW	$I_F=50$ mA
SE2460-001		0.27				
SE2460-002		0.40				
SE2460-003		1.00				
Forward Voltage	V_F			1.6	V	$I_F=50$ mA
Reverse Breakdown Voltage	V_{BR}	3.0			V	$I_R=10$ μ A
Peak Output Wavelength	λ_p		935		nm	
Spectral Bandwidth	$\Delta\lambda$		50		nm	
Spectral Shift With Temperature	$\Delta\lambda_p/\Delta T$		0.3		nm/ $^{\circ}$ C	
Beam Angle ⁽¹⁾	\emptyset		18		degr.	$I_F=$ Constant
Radiation Rise And Fall Time	t_r, t_f		0.7		μ s	

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	75 mA
Power Dissipation	125 mW ⁽¹⁾
Operating Temperature Range	-55°C to 125°C
Storage Temperature Range	-65°C to 150°C
Soldering Temperature (10 sec)	260°C

Notes

1. Derate linearly from 25°C free-air temperature at the rate of 1.19 mW/ $^{\circ}$ C, when soldered into a double sided printed circuit board.

SCHEMATIC



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

Honeywell

SE2460

GaAs Infrared Emitting Diode

Fig. 1 Radiant Intensity vs Angular Displacement gra_111.ds4

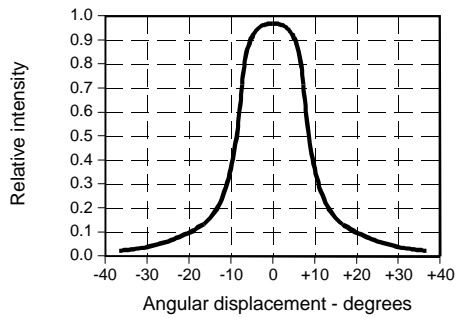


Fig. 2 Radiant Intensity vs Forward Current gra_014.ds4

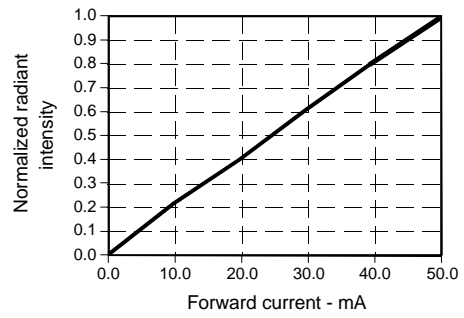


Fig. 3 Forward Voltage vs Forward Current gra_203.ds4

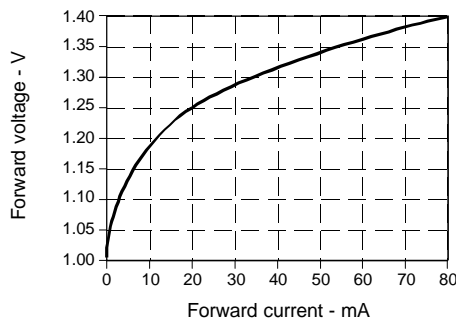


Fig. 4 Forward Voltage vs Temperature gra_200.ds4

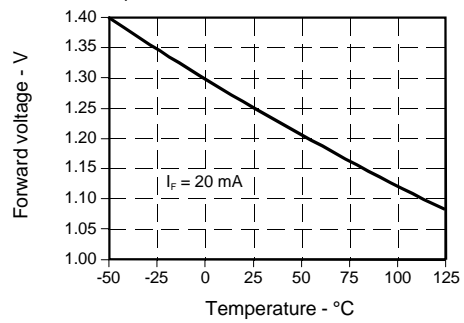


Fig. 5 Spectral Bandwidth gra_005.ds4

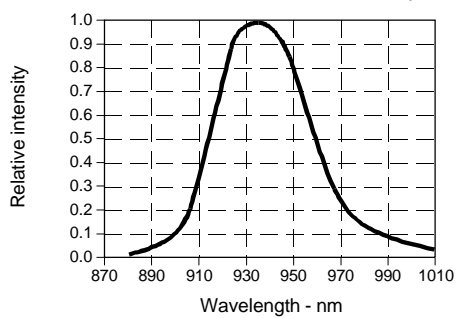
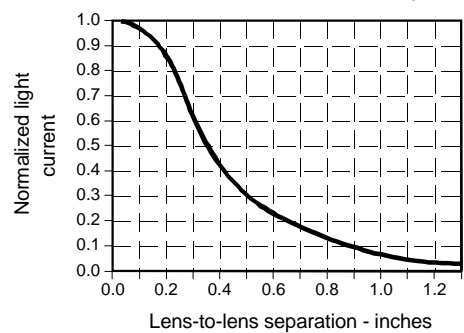
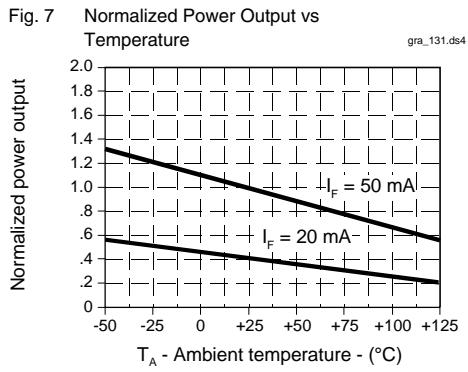


Fig. 6 Coupling Characteristics with SD2440 gra_015.ds4



SE2460

GaAs Infrared Emitting Diode



All Performance Curves Show Typical Values