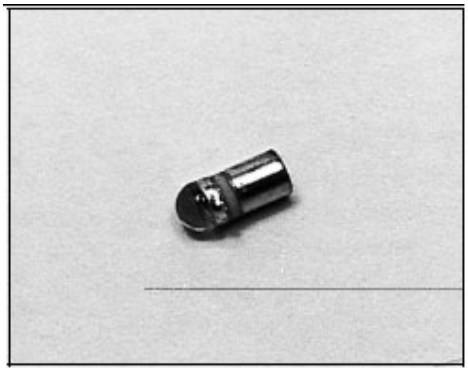
CHINA SENSOR
中国传感器 – 原装正品，现货直供

SE2470

GaAs infrared emitting diode

characteristic：

- Miniature, sealed, spherical, can be metal encased
- 18° (nominal) beam aperture Angle
- Wide operating temperature range (-55°C to +125°C)
- The power output is larger than GaAs under the equivalent drive current
- It can be perfectly installed directly on the printed circuit board
- 880nm wavelength
- It can be mechanically and spectrally matched with the SD2420 photoelectric diode, SD2440 photoelectric transistor and SD2410 photosensitive Darlington amplifier.



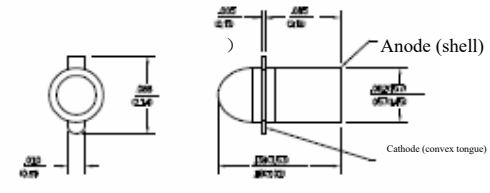
INFRA-1.TIF

Description: The SE2470 is a high-intensity gallium aluminum arsenide infrared emitter housed in a sealed coaxial metal can with a glass lens. This package is designed for direct mounting on double-sided PCBs. When operating at the same forward current, these devices typically demonstrate 70% higher power intensity than comparable models.

Dimensions: inches (mm)

Tolerance: 3 plc decimals ± 0.005 (0.12)

2 plc decimals ± 0.020 (0.51)



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Electrical characteristics (25℃ unless otherwise stated)

parameter	symbol	Minimum value Standard value Maximum value	unit	test condition
Radiation Stre-ngth SE2470-001	IE	1.7	mW/sr	I_F =50mA
SE2470-002		6.0		
direct voltage	V_F	1.8	V	I_F=50mA
breakdown reverse voltage	V_{BR}	3.0	V	I_R =10μA
Peak output wavelength	λp	880	nm	
spectral bandwidth	Δλ	80	nm	
The spectrum drifts with tempe-rature	Δλp/ΔT	0.2	nm /℃	
Beam(2)	Φ	18	°（linear me-	I_F = constant
Radiation rise and fall time	t_r , t_f	0.7	asure）μs	

pour：

1. Measurements in MW/sr Are Converted to 0.01 Steradian, a Spherical Arc Degree.
2. The definition of a beam refers to the total angular range covered by the beam between its half-intensity points.

Absolute maximum rating

(If no other explanation is given, the atmospheric temperature is 25℃) continuous positive current 75mA

power dissipation 125 mW(1)

operating temperature range -55℃ to 125℃

Storage temperature range -65℃ to 150

Welding temperature (10 seconds) ℃ 260℃

diagrammatic sk-etch

positive pole

The anode

pour：

1. When soldering a double-sided printed circuit board, the ambient temperature is 25℃ starts to decrease linearly at a rate of 1.19 mW/℃.

Figure 1 Relationship Between Radiation Intensity and Angular Offset

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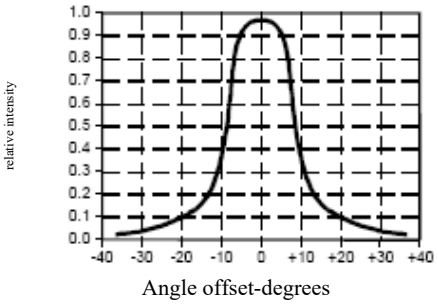


Figure 2. Relationship Between Radiation Intensity and Forward Current

gra_016.ds4

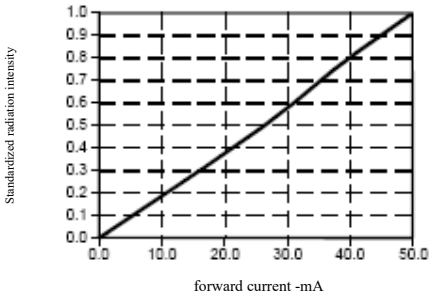


Figure 3. The Relationship Between Forward Voltage and Forward Current

gra_204.ds4

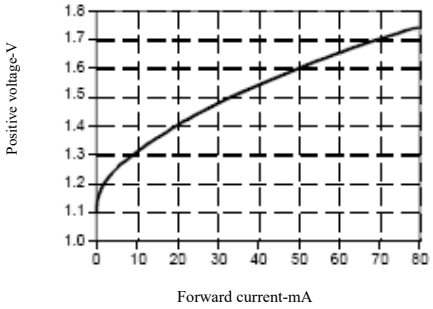


Figure 4. Relationship Between Forward Voltage and Temperature

gra_202.ds4

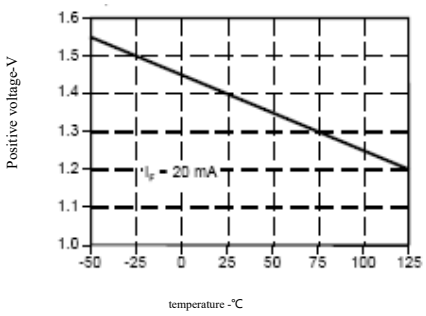
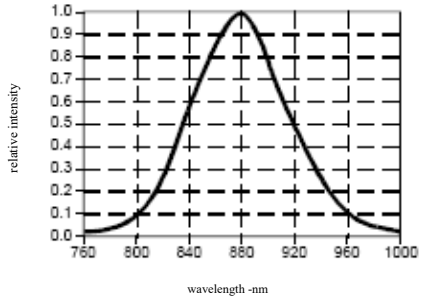


Figure 5. Spectral Bandwidth

Figure 6. coupling characteristics of SD2440 gra_011.ds4

gra_015.ds4



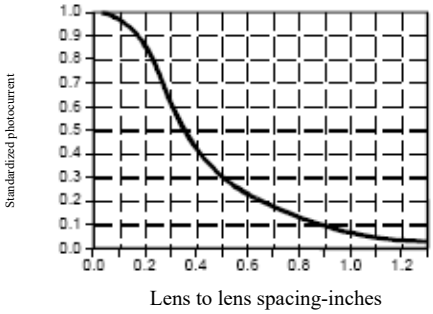
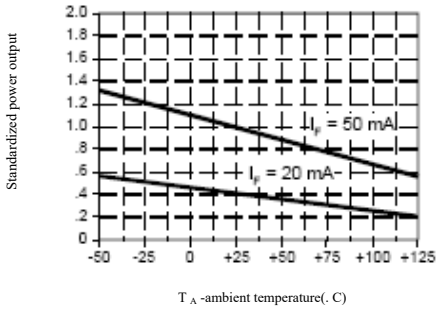


Figure 7. Relationship Between Standardized Power Output and Temperature

gra_131.ds4



All performance curves are expressed as standard values