SEP8736

AIGaAs Infrared Emitting Diode

FEATURES

- Side-looking plastic package
- 10° (nominal) beam angle
- 880 nm wavelength

DESCRIPTION

- Enhanced coupling distance
- Mechanically and spectrally matched to SDP8436 phototransistor

The SEP8736 is an aluminum gallium arsenide infrared

emitting diode molded in a side-emitting smoke gray

plastic package. The body and integral lens design combines the mounting advantage of a side-emitting package with the narrow emission pattern of a T-1 style

device. The SEP8736 IRED is designed for those

applications which require longer coupling distances than standard side-emitting devices can provide, such

as touch screens. The IRED is also especially well

suited to applications in which adjacent channel

crosstalk could be a problem.



INFRA-80.TIF

OUTLINE DIMENSIONS in inches (mm)

Tolerance 3

3 plc decimals ±0.005(0.12) 2 plc decimals ±0.020(0.51)



DIM_070.ds4

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

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ELECTRICAL CHARACTERISTICS (25)	'C unless ot	nerwise noted)	

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Irradiance ⁽¹⁾	Н				mW/cm ²	l _F =20 mA
SEP8736-001		0.5				
SEP8736-002		1.2		3.0		
SEP8736-003		1.7				
Forward Voltage	VF			1.7	V	I _F =20 mA
Reverse Breakdown Voltage	VBR	3.0			V	I _R =10 μΑ
Peak Output Wavelength	λρ		880		nm	
Spectral Bandwidth	Δλ		80		nm	
Spectral Shift With Temperature	$\Delta \lambda_p / \Delta_T$		0.2		nm/°C	
Beam Angle (2)	Ø		10		degr.	IF=Constant
Radiation Rise And Fall Time	t _r , t _f		0.7		μs	

Notes 1. Measured in mW/cm² into a 0.104 (2.64) diameter aperture placed 0.500(12.7) from the lens tip. 2. Beam angle is defined as the total included angle between the half intensity points.

50 mA 100 mW (1) -40°C to 85°C -40°C to 85°C 240°C

ABSOLUTE MAXIMUM RATINGS

(25°C Free-Air Temperature unless otherwise noted)

Continuous Forward Current
Power Dissipation
Operating Temperature Range
Storage Temperature Range
Soldering Temperature (5 sec)

Notes

1. Derate linearly from 25°C free-air temperature at the rate of 0.78 mW/°C.



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All Performance Curves Show Typical Values

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