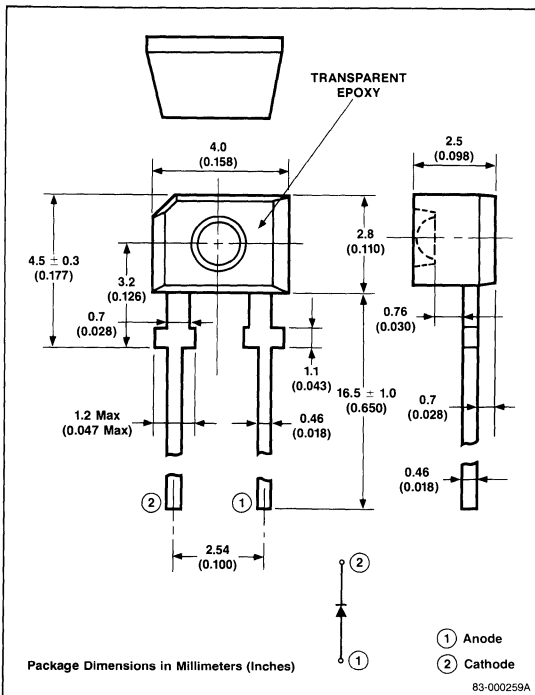


Description

The SE308 is a GaAs (Gallium Arsenide) infrared LED in a plastic molded package, and is very suitable as a detector of a photo interrupter. On forward bias, it emits a spectrally narrow band of radiation peaking at 940nm.

Package Dimensions



Absolute Maximum Ratings

$T_A = +25^\circ\text{C}$

Power Dissipation, P_D	100mW
Forward Current, I_F	50mA
Reverse Voltage, V_R	5V
Junction Temperature, T_J	100°C
Operating Temperature, T_{OPT}	-20°C ~ +80°C
Storage Temperature, T_{STG}	-40°C ~ +100°C

Electrical Characteristics

$T_A = +25^\circ\text{C}$

Parameters	Symbol	Limits			Unit	Test Conditions
		Min	Typ	Max		
Forward Voltage	V_F		1.1	1.4	V	$I_F = 20\text{mA}$
Reverse Current	I_R			5	μA	$V_R = 5\text{V}$
Capacitance	C_T		100		pF	$V = 0$, $f = 1.0\text{MHz}$
Peak Emission Wavelength	λ_{PEAK}		940		nm	$I_F = 20\text{mA}$
Spectral Line Half Width	$\Delta\lambda$		60		nm	$I_F = 20\text{mA}$
Radiant Intensity	I_E	0.5	0.85		mW/sr	$I_F = 20\text{mA}$
Response Time	t_{ON}, t_{OFF}		1		μs	$I_F = 20\text{mA}$

Typical Characteristics

$T_A = +25^\circ\text{C}$

