

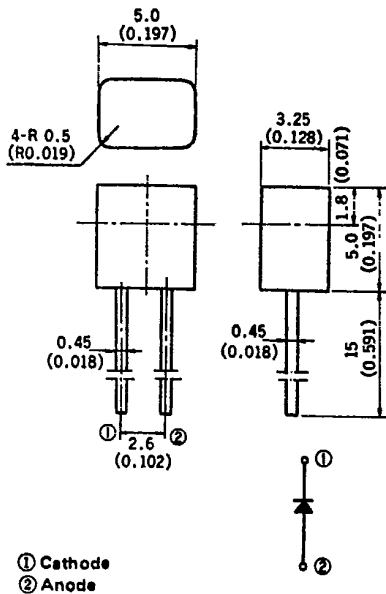
LIGHT EMITTING DIODE

SE304

GaAs INFRARED EMITTING DIODE

—NEPOC SERIES—

PACKAGE DIMENSIONS in millimeters (inches)



The SE304 is a GaAs(Gallium Arsenide) Infrared LED in a plastic molded package, and very suitable for a detector of a photo interrupter. On forward bias, it emits a spectrally narrow band of radiation peaking at 940 nm.

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

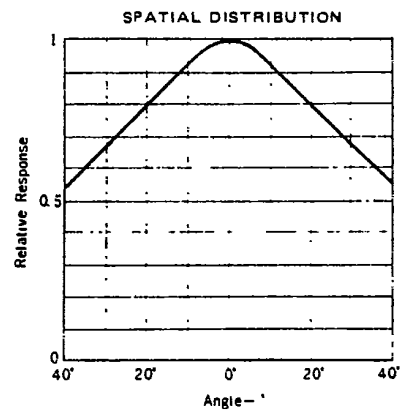
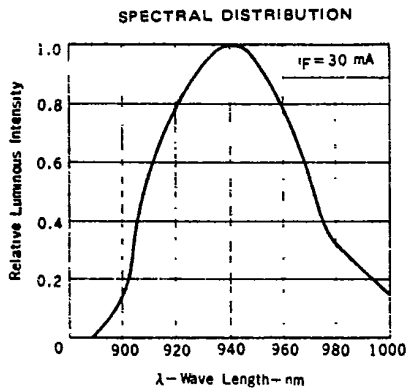
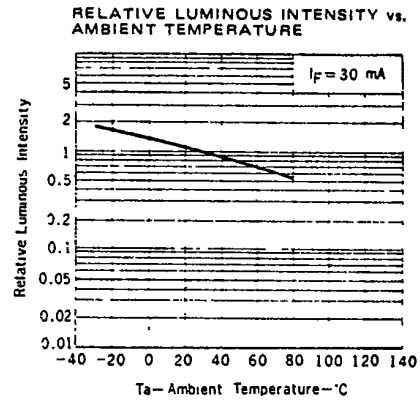
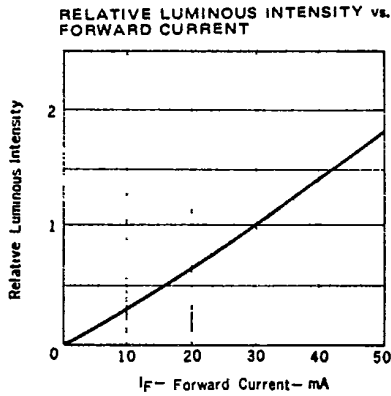
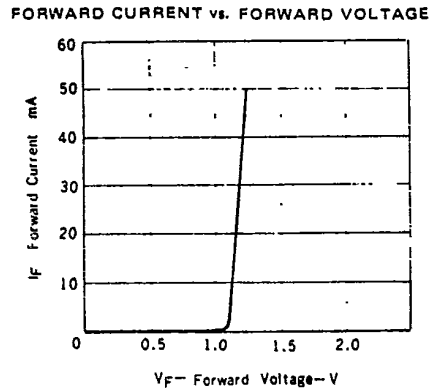
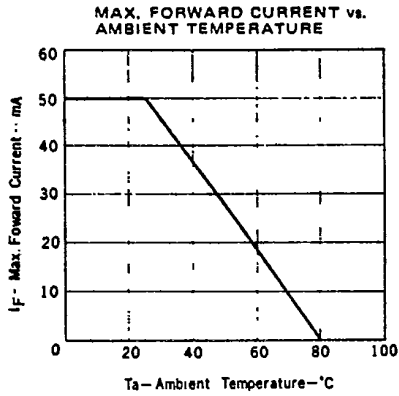
Power Dissipation	P_D	100	mW
Forward Current	I_F	50	mA
Reverse Voltage	V_R	5	V
Junction Temperature	T_j	100	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to +100	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Forward Voltage	V_F		1.2	1.4	V	$I_F = 30\text{ mA}$
Reverse Current	I_R			10	μA	$V_R = 3\text{ V}$
Capacitance	C_t		100		pF	$V = 0, f = 1.0\text{ MHz}$
Peak Emission Wavelength	λ_{peak}		940		nm	$I_F = 30\text{ mA}$
Spectral Line Half Width	$\Delta\lambda$		60		nm	$I_F = 30\text{ mA}$
Output Power	P_o	1.0	1.5		mW	$I_F = 30\text{ mA}$
Light Turn-On and Turn-Off	t_{on}, t_{off}		1		μs	$I_F = 30\text{ mA}$

TYPICAL CHARACTERISTICS (Ta = 25 °C)

T-41-11



2.