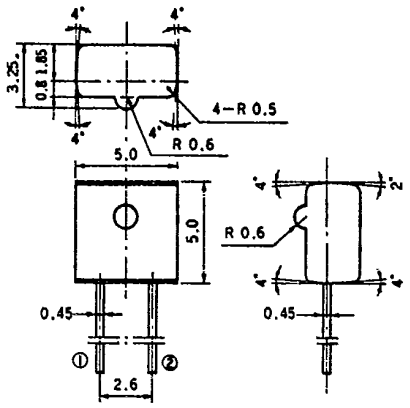
LIGHT EMITTING DIODE
SE306

GaAs INFRARED EMITTNG DIODE

PACKAGE DIMENSIONS
in millimeters



① Cathode
② Anode

The SE306 is a GaAs(Gallium Arsenide) Infrared LED in a plastic molded package, and very suitable for a detecter 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 °C)

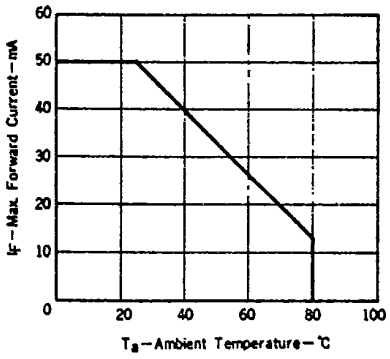
Power Dissipation	P_D	100	mW
Forward Current	I_F	50	mA
Reverse Voltage	V_R	5	V
Junction Temperature	T_j	100	°C
Storage Temperature	T_{stg}	−40 to +100	°C

ELECTRICAL CHARACTERISTICS (T_a = 25 °C)

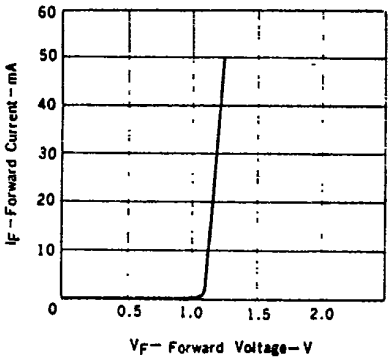
CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Forward Voltage	V_F		1.1	1.4	V	I_F = 10 mA
Reverse Current	I_R			10	μA	V_R = 5 V
Capacitance	C_t		100		pF	V = 0, f = 1.0 MHz
Peak Emission Wavelength	λpeak		940		nm	I_F = 10 mA
Spectral Line Half Width	Δλ		60		nm	I_F = 10 mA
Output Power	I_e	0.2	0.5		mW/sr	I_F = 10 mA

TYPICAL CHARACTERISTICS (T_a = 25 °C)

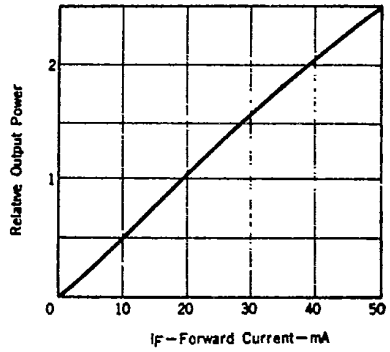
MAX. FORWARD CURRENT vs. AMBIENT TEMPERATURE



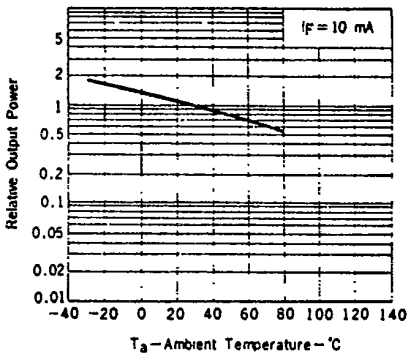
FORWARD CURRENT vs. FORWARD VOLTAGE



RELATIVE OUTPUT POWER vs. FORWARD CURRENT



RELATIVE OUTPUT POWER vs. AMBIENT TEMPERATURE



SPECTRAL DISTRIBUTION