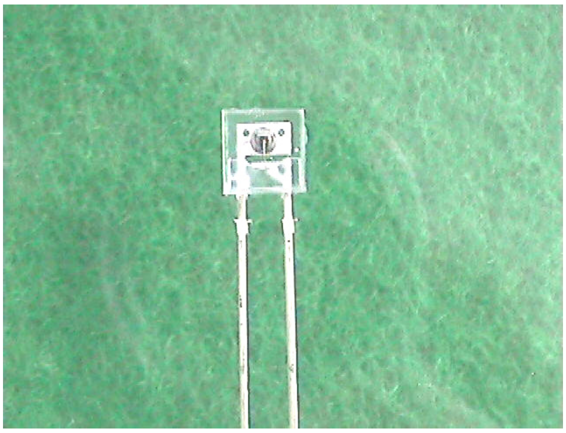
OSE-23F

INFRARED EMITTING DIODE

■ General Description

The OSE-23F is a high power GaAs IRED mounted in a clear side-looking package is compact low profile , and easy to mount .



■ Features

- Compact
- Low profile package
- Low cost plastic package
- Meet RoHs

■ Applications

- Optical sensor
- Photo interrupters
- Mouse , Toys

■ MAXIMUM RATINGS

(Ta=25°C)

Item	Symbol	Rating	Unit
Reverse voltage	V_R	5	V
Forward direct current	I_F	60	mA
Power dissipation	P_D	100	mW
Pulse forward current *1	I_{FP}	1	A
Operating temperature	Topr	-20 ～ +100	℃
Storage temperature	Tstg	-30 ～ +100	℃
Lead soldering temp. *2	Tsol	260	℃

* 1 pulse width : tw ≦ 100sec , T = 10msec

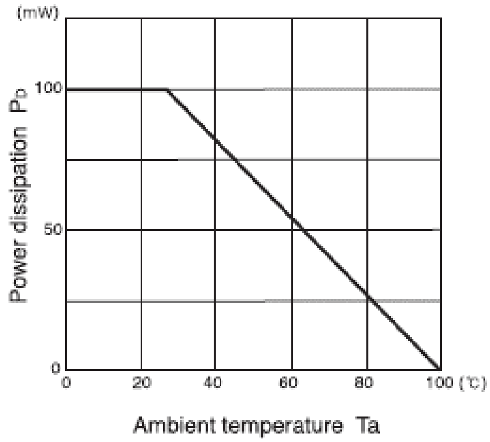
* 2 For MAX. 5 secends at the position of 2mm from the package

■ ELECTRO-OPTICAL CHARACTERISTICS

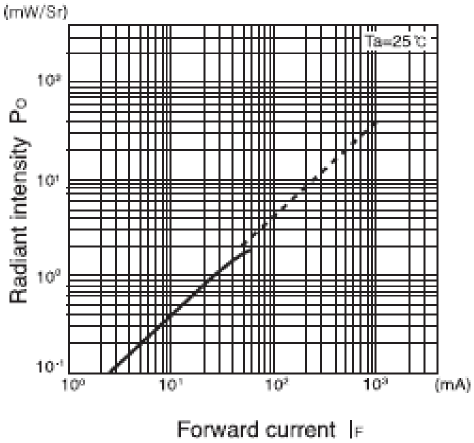
(Ta=25°C)

Item	Symbol	Condition	Min	Typ	Max	Unit
Radiant intensity	P_O	I_F=60mA		2.0		mW/Sr
Forward voltage	V_F	I_F=60mA		1.3	1.6	V
Reverse current	I_R	V_R=5V			10	μ A
Peark emission wavelength	λ p	I_F=60mA		940		nm
Spectral band width @ 50%	Δ λ	I_F=60mA		50		nm
Capacitance	Ct	f=1MHz		25		pF
Viewing half angle	Δ θ	I_F=60mA		±30		deg.

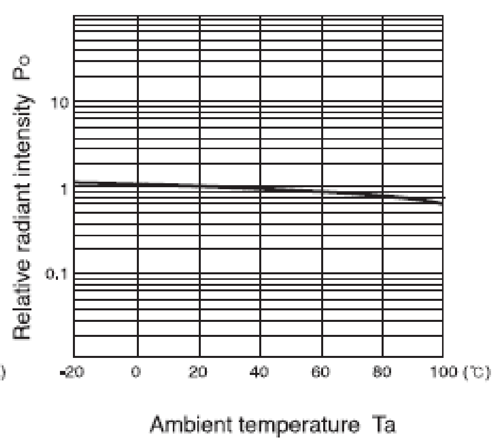
Power dissipation Vs. Ambient temperature



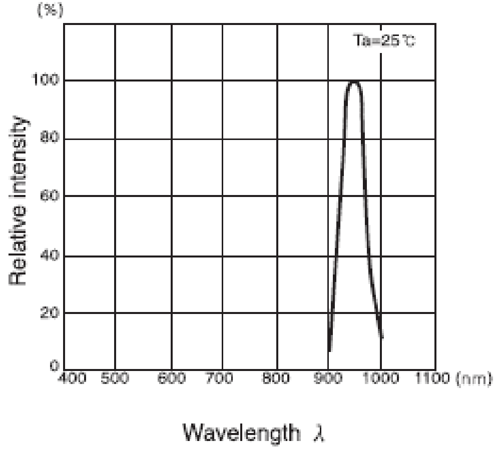
Radiant intensity Vs. Forward current



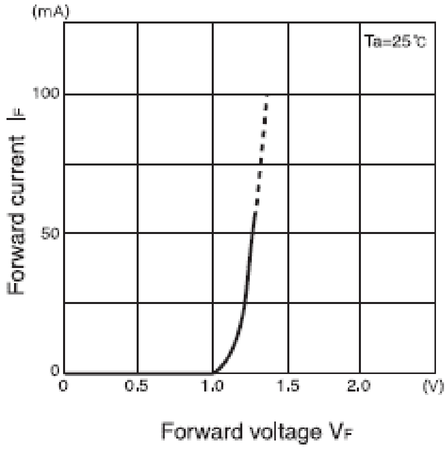
Relative radiant intensity Vs. Ambient temperature



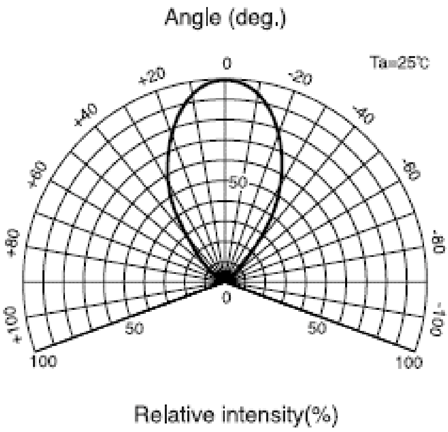
Relative intensity Vs. Wavelength



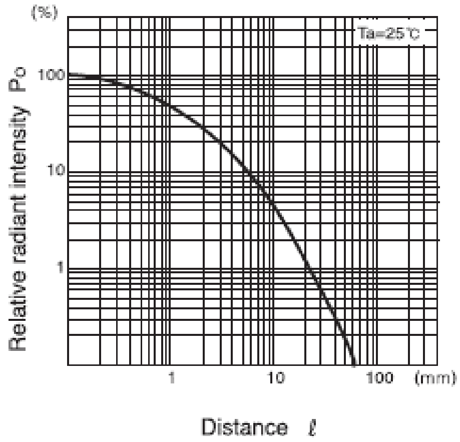
Forward current vs. Forward voltage

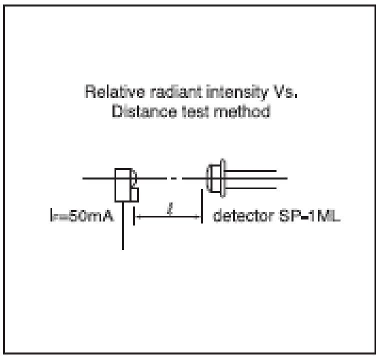


Radiant Pattern



Relative radiant intensity Vs. Distance





■ DIMENSIONS

(Unit: mm)