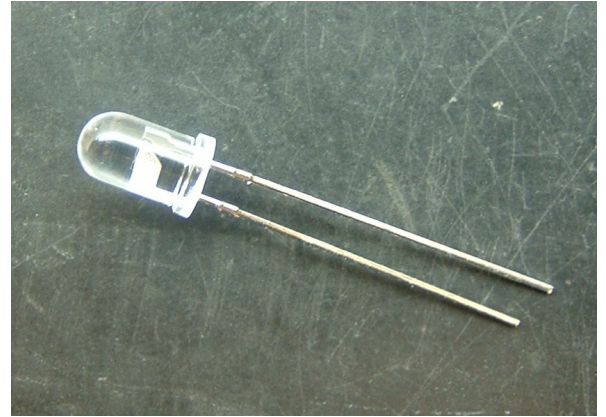


General Description

The OSE-1L7 are high-power GaAs IREDS mounted in a clear plastic package. With lensed package and cup type frame, these efficient devices have narrow beam angle



Features

- Narrow beam angle
- High output power
- Available for pulse operating
- Meet RoHS

Applications

- Emitters of remote control
- Fiber optic communications
- Smoke sensors

MAXIMUM RATINGS

(Ta=25°C)

Item	Symbol	Rating	Unit
Pulse forward current *1	I _{FP}	1	A
Forward direct current	I _{FM}	100	mA
Reverse voltage	V _{RM}	4	V
Operating temperature.	T _{opr}	-25 ~ +75	°C
Storage temperature.	T _{stg}	-25 ~ +100	°C
Power dissipation	P _d	170	mW
Soldering temperature. *2	T _{sol}	260	°C

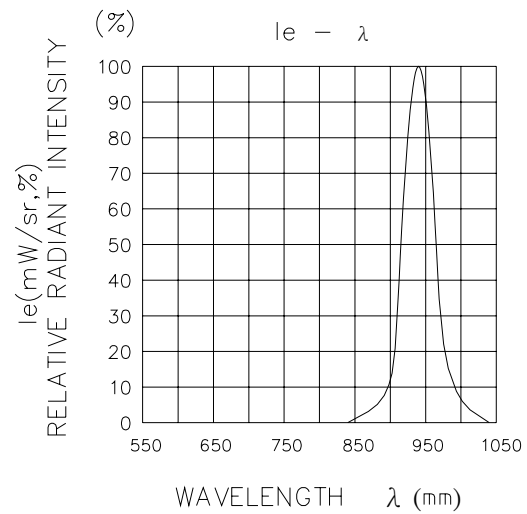
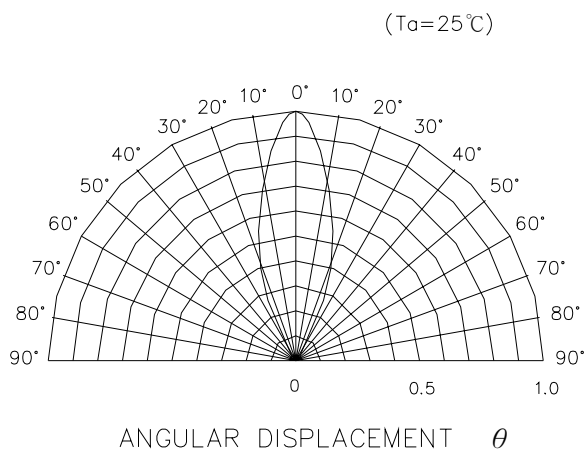
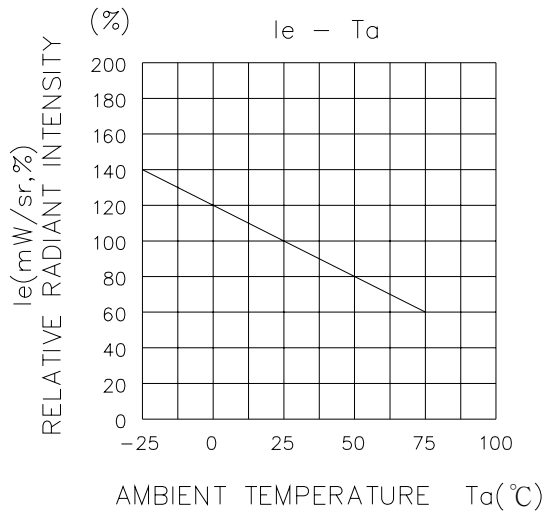
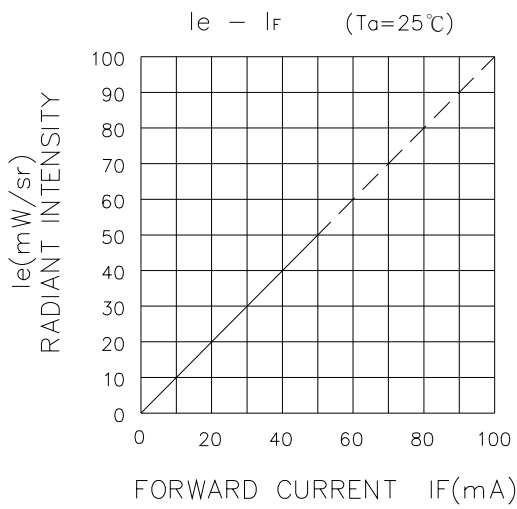
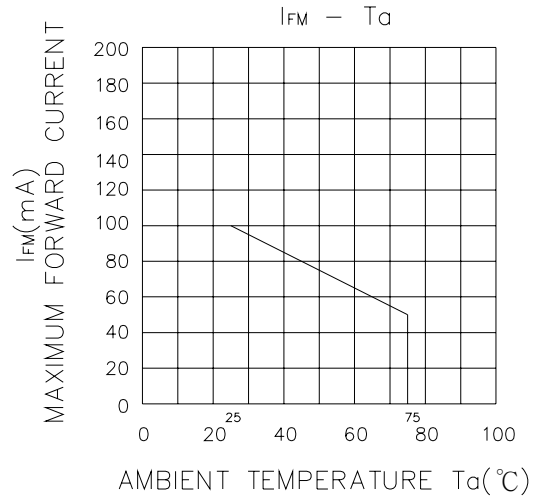
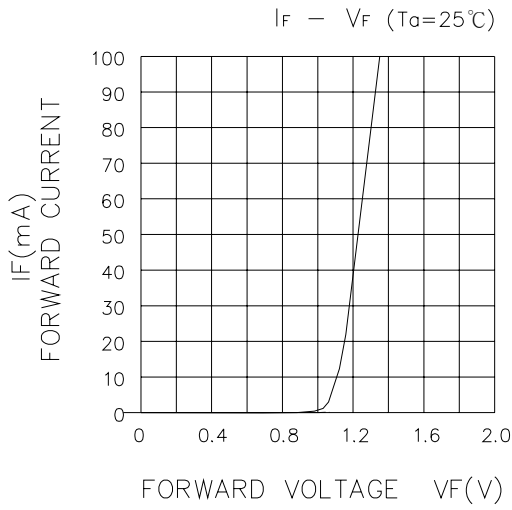
*1 Tw = 100usec · T = 10msec

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

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25°C)

Item	Symbol	Condition	Min	Typ	Max	Unit
Radiant intensity	I _e	I _F = 50mA	30	50		mW/sr
Forward voltage	V _F	I _F = 100mA		1.35	1.7	V
Reverse current	I _R	V _R = 4V			10	uA
Peak emission wavelength	λ _p	I _F = 50mA		940		nm
Spectral band width @ 50%	Δλ	I _F = 50mA		50		nm
Rise time / Fall time	tr / tf	I _F = 50mA		80 / 180		ns
Viewing angle	Δθ	I _F = 50mA		±17.5		deg.



Lamp Condition

In the automatic mounting of LAMP LED to the L/F , any bending , expanding and pulling forces against the LAMP LED should be minimized to prevent the electrical failures or mechanical damaged .

Reflow Soldering and Temperature Profile

The LAMP LED is designed for the reflow soldering process . Too high temperature or too large temperature gradient may cause the electrical and optical failures .

