

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

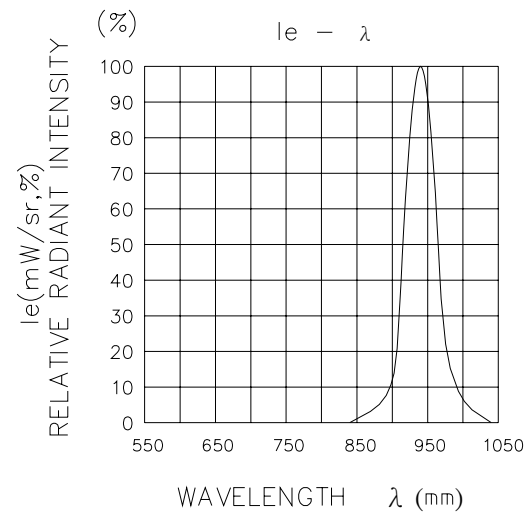
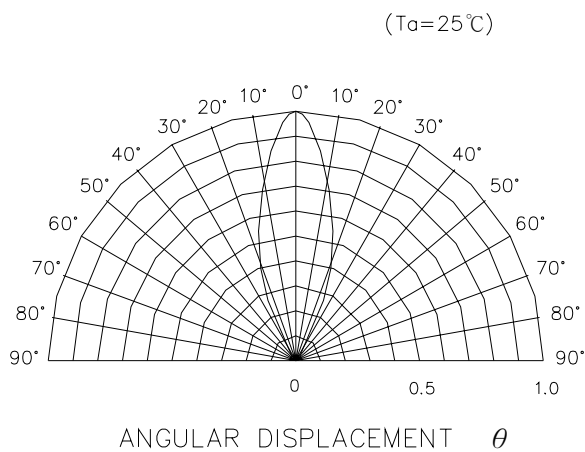
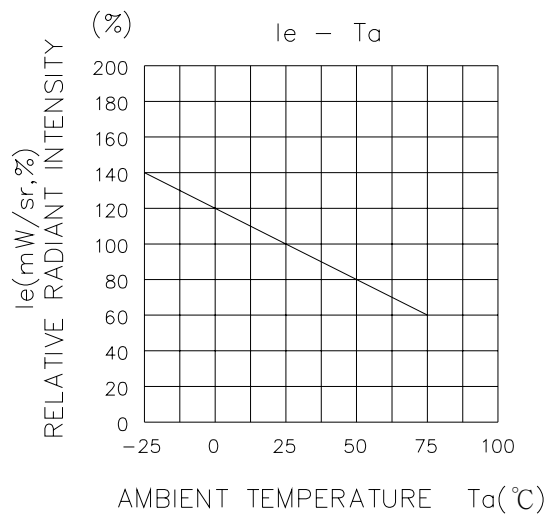
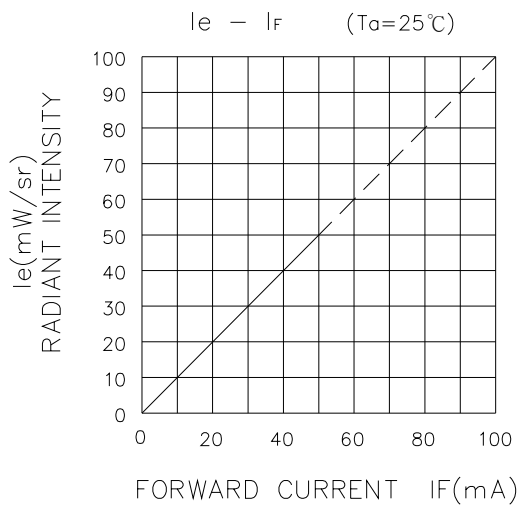
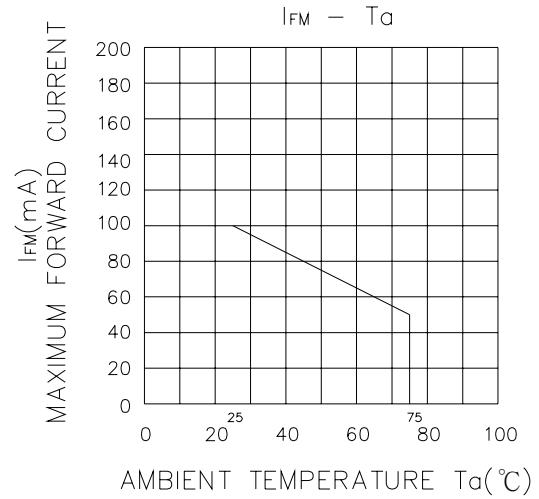
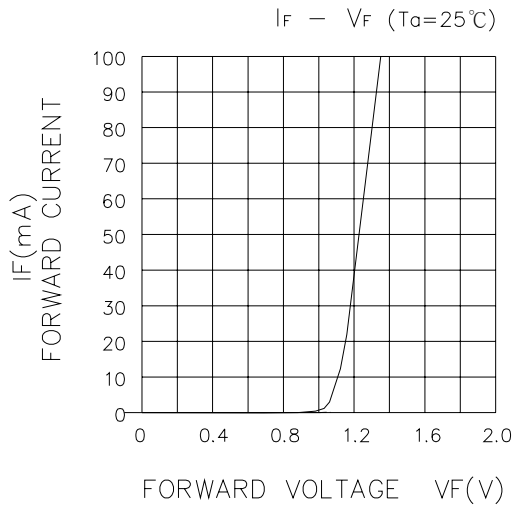
*1 Tw = 100usec 、 T = 10msec

*2 For MAX. 5 secends 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.



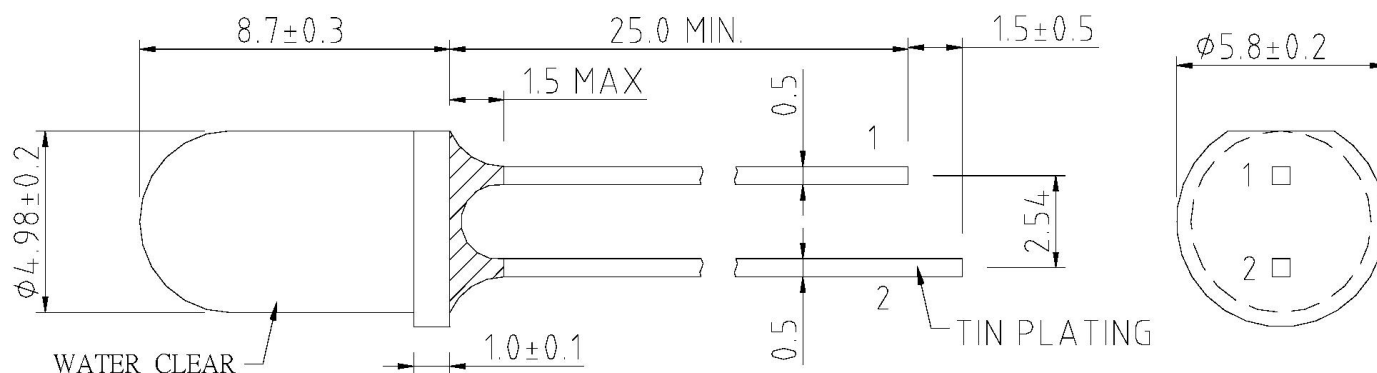
Reliability Test Items

CONDITIONS :

The reliability of products shall be satisfied with items listed below .

NO.	Item	Condition	Time / Cycle	Number of Damaged
1	Soldering Heat Test	260°C	5 sec	0/60
2	Thermal Shock	0°C (15 sec) ~ 100°C (15 sec)	20 cycle	0/60
3	High Temp. Storage	100°C	1000 Hrs	0/60
4	Low Temp. Storage	-25°C	1000 Hrs	0/60
5	Operation Temperature Cycle TEST	-25°C ~ 75°C	100 Cycles , 200Hrs	0/60
6	High Temp. High Humidity Test	60°C , 90% RH	1000 Hrs	0/60
7	Operation Life Test	Room Temp. 50mA	1000 Hrs	0/60

Dimemnsions



SIGN : 1. CATHODE

2. ANODE

UNIT : mm

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 .

