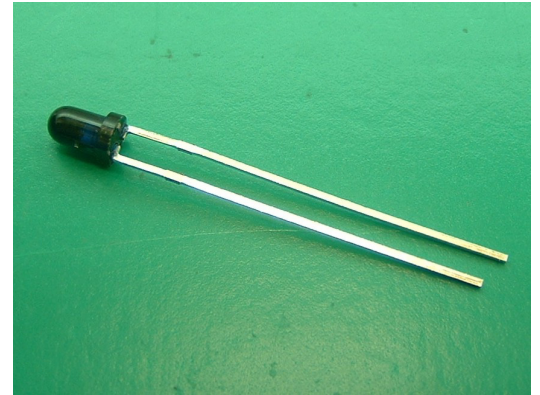


General Description

The OSP-3LR2 is a high output , high speed photodiode mounted in black plastic package.

Features

- High output power
- Narrow angular response
- Low cost
- Meet RoHS



Applications

- Optical switches
- Optical detectors

MAXIMUM RATINGS

(Ta=25°C)

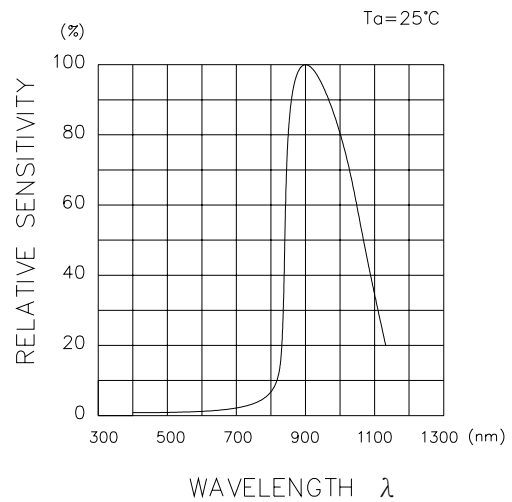
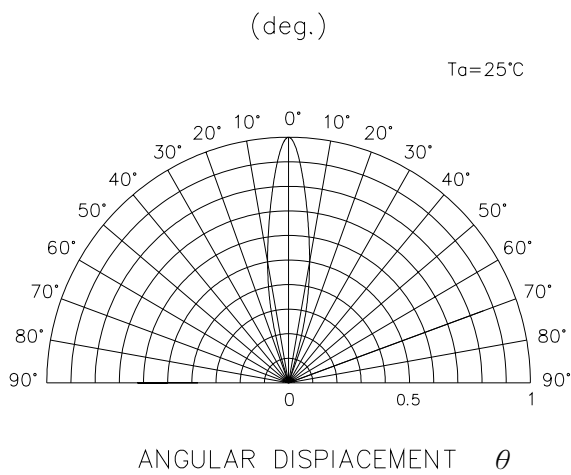
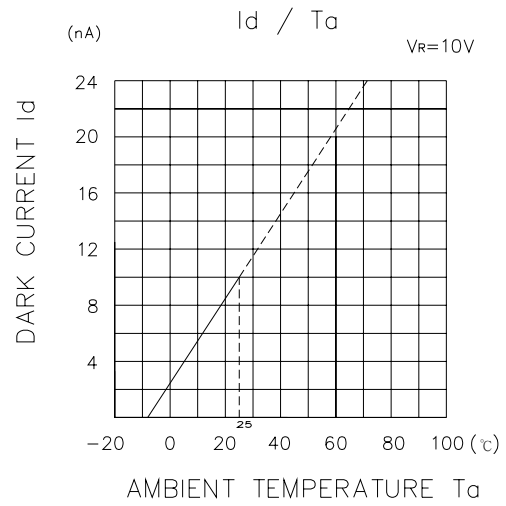
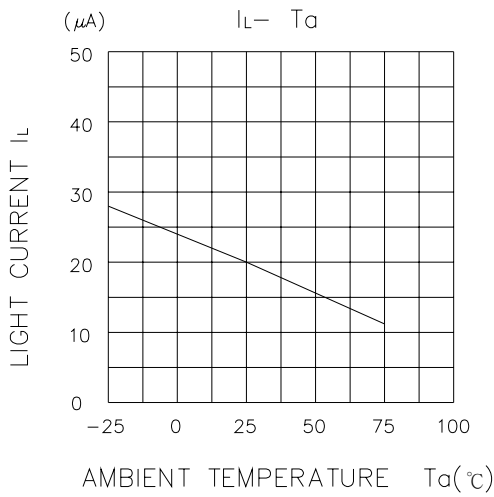
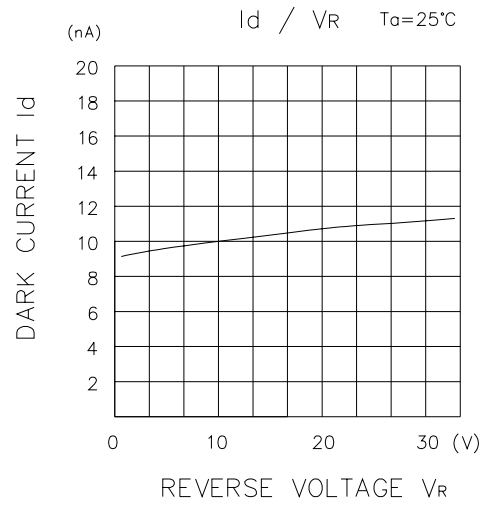
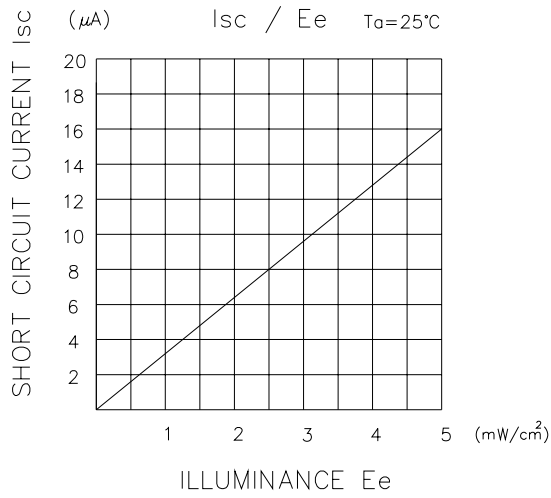
Item	Symbol	Rating	Unit
Maximum reverse voltage	V _{RM}	50	V
Operating temperature.	T _{opr}	-25 ~ +75	°C
Storage temperature.	T _{stg}	-25 ~ +100	°C
Soldering temperature. *1	T _{sol}	260	°C

* 1 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
Reverse breakdown voltage	V _{BR}	I _R = 100uA	33	170		V
Reverse dark current	I _D	V _{cc} = 10V			10	nA
Open circuit voltage	V _{oc}	E _e = 5mW/cm ²		410		mV
Short circuit current	I _{sc}	E _e = 5mW/cm ²		16		uA
Light current	I _L	λ _p = 940nm E _e = 0.5mW/cm ²	12	20		uA
Total capacitance	C _t	V _{cc} = 5V , f = 1MHz		6		pF
Radiant sensitivity area	A			1.6		mm ²
Peak sensitive wavelength	λ _p			900		nm
Switching speeds	Turn-on time	ton	V _{cc} = 5V , R _L = 50Ω λ _p = 850nm	10		nsec
	Turn-off time	toff		10		nsec
Half angle	Δθ			±10		deg.



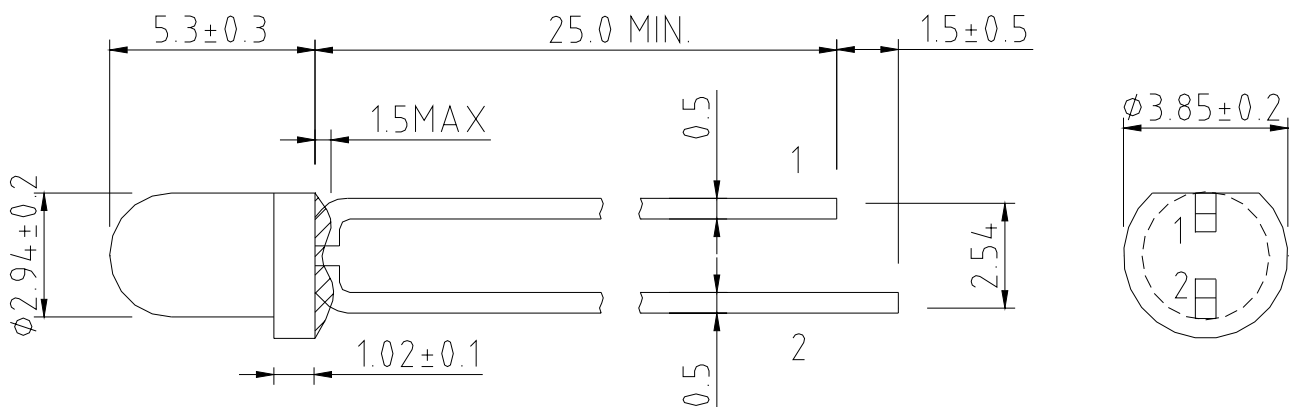
Reliability Test Items

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. @TR940nm	1000 Hrs	0/60

Dimensions



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 .

