

### Peak Emission Wavelength: 940nm

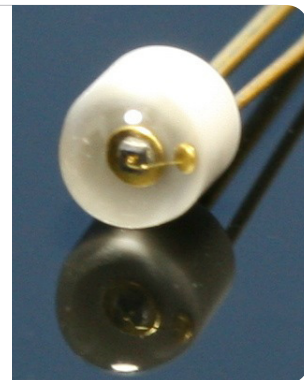
The 940nm IR emitter series is designed for applications requiring high output and precise optical / mechanical axis alignment. Custom package solutions and sorting are available.

#### FEATURES

- > Ceramic Package
- > High Output Power
- > Compact
- > High Reliability

#### APPLICATIONS

- > Optical Switches
- > Optical Sensor



### Absolute Maximum Ratings (Ta=25°C)

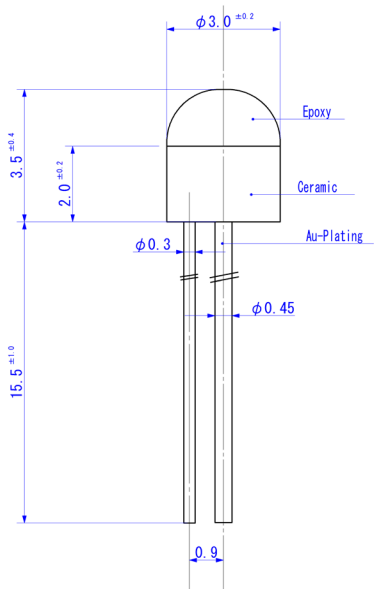


ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	60	mA
Forward Current (Pulse)*1	IFP	0.5	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	100	mW
Operating Temperature Range	Topr	-20 ~ +85	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C
Junction Temperature	Tj	100	°C
Lead Soldering Temperature*2	Tls	260	°C

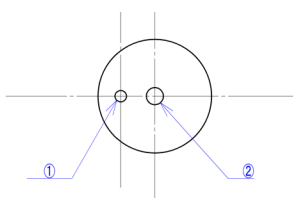
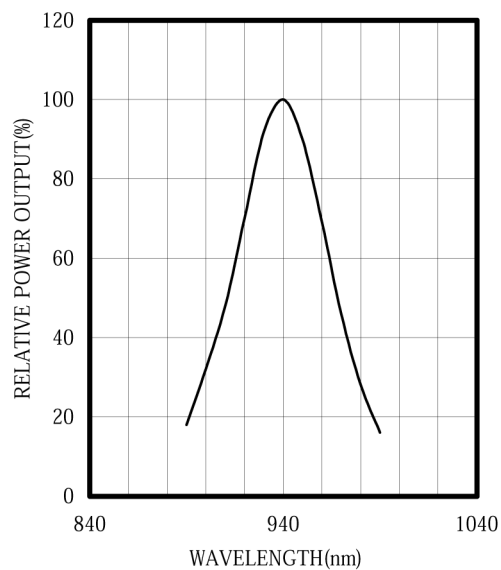
\*1: Tw=10μsec, T=10msec. \*2: Time 5 Sec max, Position: Up to 3mm from the body.

### Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA	--	4.0	--	mW
Forward Voltage	VF	IF=20mA	--	1.2	1.5	V
Reverse Current	IR	VR=5V	--	--	10	μA
Peak Emission Wavelength	λp	IF=20mA	--	940	--	nm
Spectral Line Half Width	Δλ	IF=20mA	--	50	--	nm
Half Intensity Beam Angle	Θ	IF=20mA	--	±80	--	deg
Rise Time	Tr	IFP=50mA	--	1.0	--	μS
Fall Time	Tf	IFP=50mA	--	1.0	--	μS
Junction Capacitance	Cj	1MHz, V=0V	--	20	--	pF
Temperature Coefficient of PO	P/T	IF=10mA	--	-0.5	--	%/°C
Temperature Coefficient of VF	V/T	IF=10mA	--	-1.3	--	mV/°C

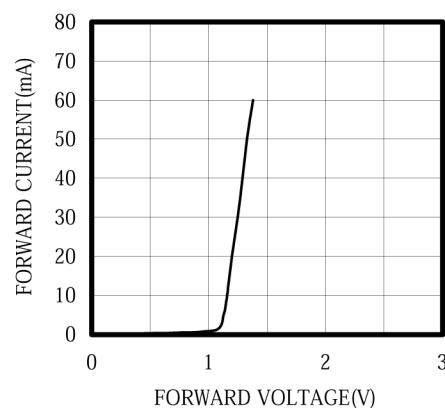


SPECTRAL OUTPUT



① Anode      ② Cathode

FORWARD I-V CHARACTERISTICS



Unit: mm, Tolerance:  $\pm 0.2$

2011-08-11

