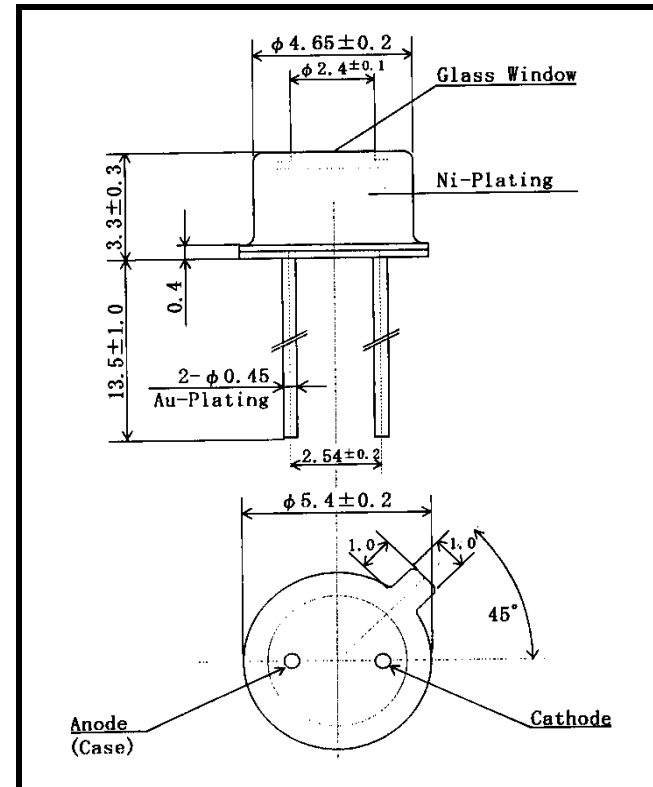
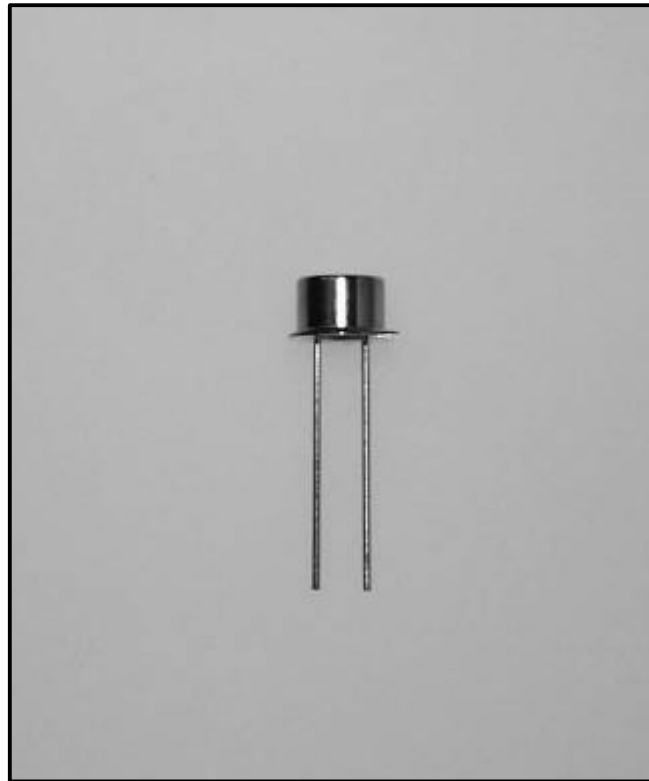


IR-880-TO-90TS-B

Infrared Emitting Diode



Dimensions (Unit:mm)

2. ELECTRICAL & OPTICAL CHARACTERISTICS (Ta=25 °C)

ITEM	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=50mA	1.0	1.6		mW
Forward Voltage	VF	IF=50mA		1.45	1.8	V
Reverse Current	IR	VR=5V			10	μA
Peak Wavelength	λ	IF=50mA	860	880		nm
Spectral Line Half Width		IF=50mA		60		nm
Half Intensity Beam Angle		IF=50mA		±45		deg.
Rise Time	Tr	IFP=50mA		1.5		μS
Fall Time	Tf	IFP=50mA		0.8		μS
Junction Capacitance	Cj	1MHz, V=0V		15		pF
Temp. Coefficient of PO	P/T	IF=10mA		-0.5		%/
Temp. Coefficient of VF	V/T	IF=10mA		-1.5		mV/

- FEATURES**
- High-Power output
 - High Reliability in Demanding Environments
 - Flat Lens
 - Less Reflection
 - For user's own Design Lens
- APPLICATIONS**
- Optical Switches
 - Encoder

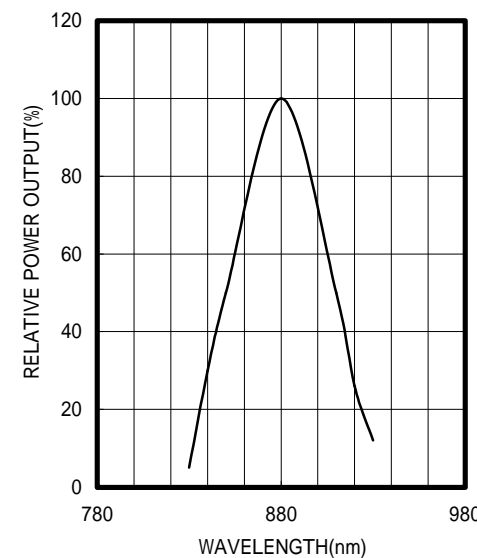
1. ABSOLUTE MAXIMUM RATINGS (Ta=25 °C)

ITEM	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	100	mA
Forward Current (Pulse)*1	IFP	1	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	180	mW
Operating Temp.	Topr	-30 TO 100	
Storage Temp.	Tstg	-40 TO 125	
Junction Temp.	Tj	125	
Lead Soldering Temp.*2	Tls	260	

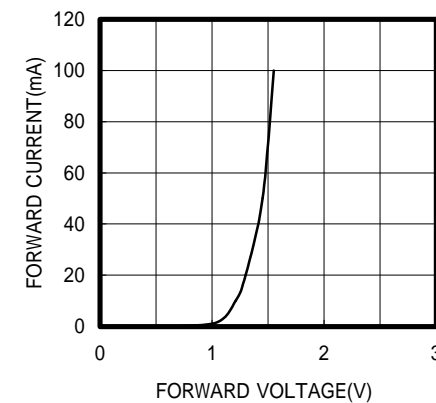
*1: Tw=10μs, T=10mS

*2: Time 5 Sec max, Position: Up to 3mm from the body

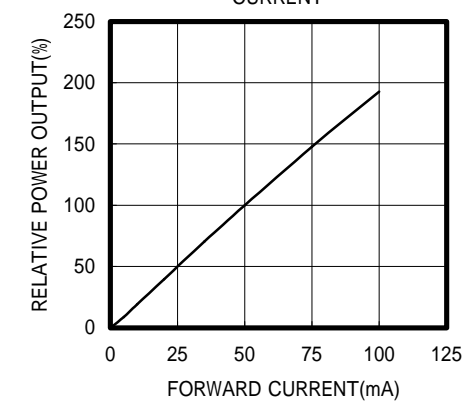
SPECTRAL OUTPUT



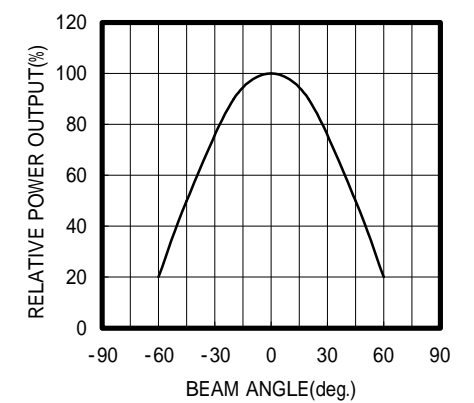
FORWARD I-V CHARACTERISTICS



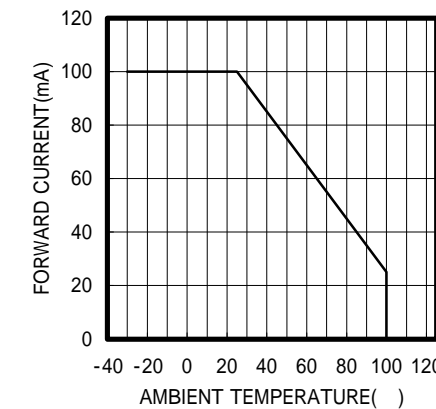
RELATIVE POWER vs FORWARD CURRENT



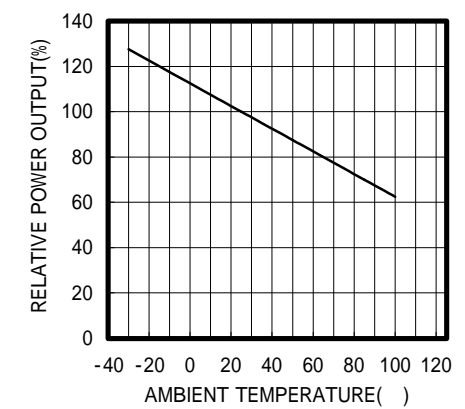
RADIATION PATTERN



THERMAL DERATING CURVE



POWER OUTPUT vs TEMPERATURE IF=10mA



FORWARD VOLTAGE vs TEMPERATURE IF=10mA

