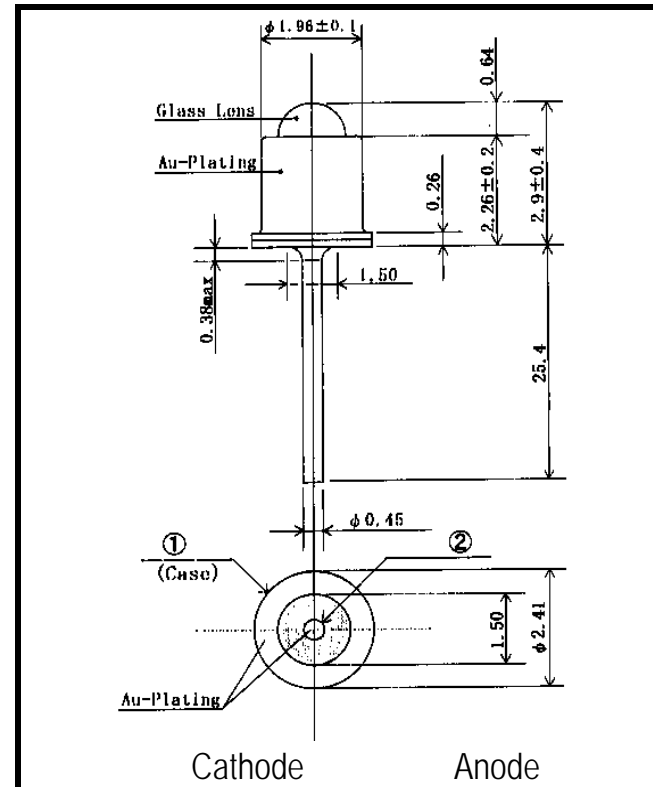


LS880PT

Infrared Emitting Diode



- FEATURES**
- High-output Power
 - Narrow Beam Angle (Excellent)
 - Compact (2mm)
 - High Reliability in Demanding Environments
- APPLICATIONS**
- Optical Switches
 - Edge Sensing (Coin Dispenser)

2.ELECTRICAL & OPTICAL CHARACTERISTICS (Ta=25)

ITEM	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=50mA		2.5		mW
Forward Voltage	VF	IF=50mA		1.45	1.8	V
Reverse Current	IR	VR=5V			10	μ A
Peak Wavelength	λ	IF=50mA		880		nm
Spectral Line Half Width		IF=50mA		60		nm
Half Intensity Beam Angle		IF=50mA		± 4		deg.
Rise Time	Tr	IFP=50mA		1.5		μ S
Fall Time	Tf	IFP=50mA		0.8		μ S
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/

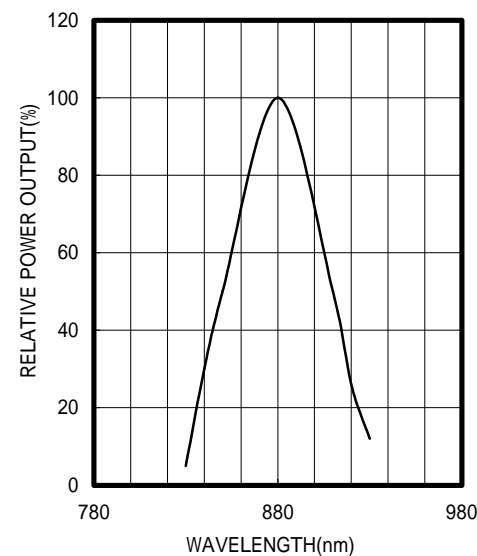
1. ABSOLUTE MAXIMUM RATINGS (Ta=25)

ITEM	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	75	mA
Forward Current (Pulse)*1	IFP	0.5	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	120	mW
Operating Temp.	Topr	-20 TO 85	
Storage Temp.	Tstg	-30 TO 100	
Junction Temp.	Tj	100	
Lead Soldering Temp.*2	Tls	260	

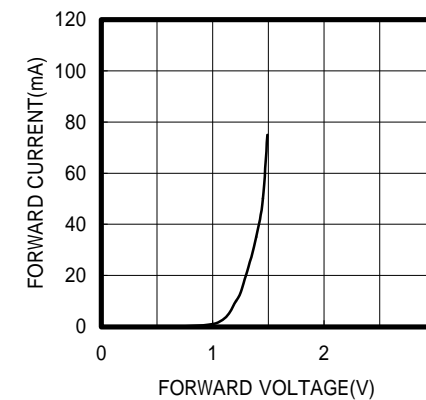
*1:Tw=10uS,T=10mS

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

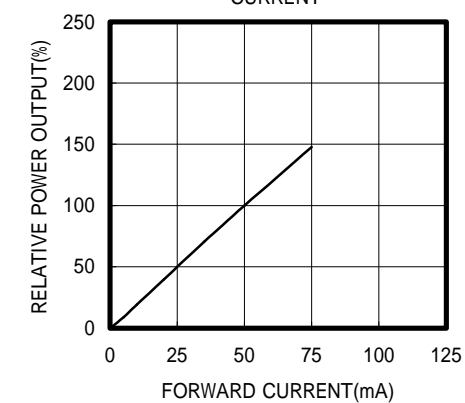
SPECTRAL OUTPUT



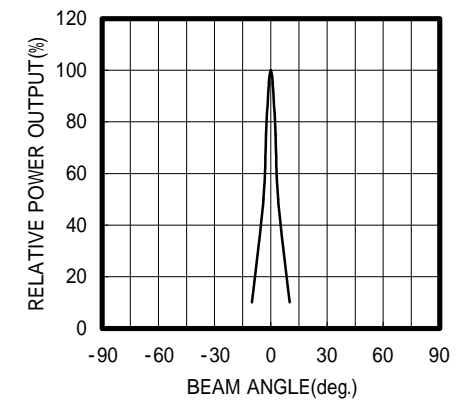
FORWARD I-V CHARACTERISTICS



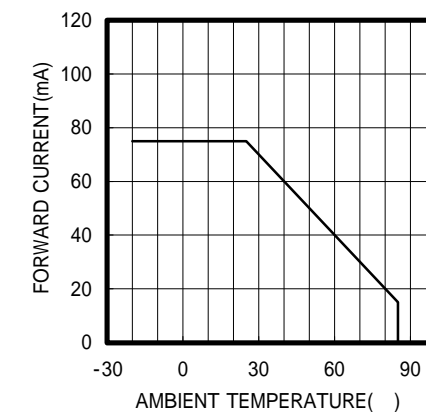
RELATIVE POWER vs FORWARD CURRENT



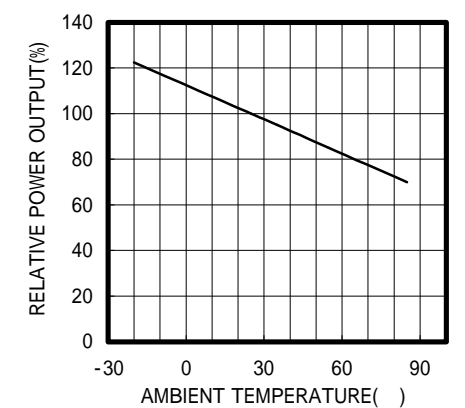
RADIATION PATTERN



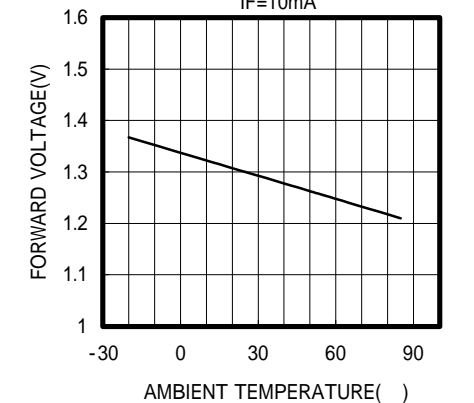
THERMAL DERATING CURVE



POWER OUTPUT vs TEMPERATURE IF=10mA



FORWARD VOLTAGE vs TEMPERATURE IF=10mA



OPTRANS

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