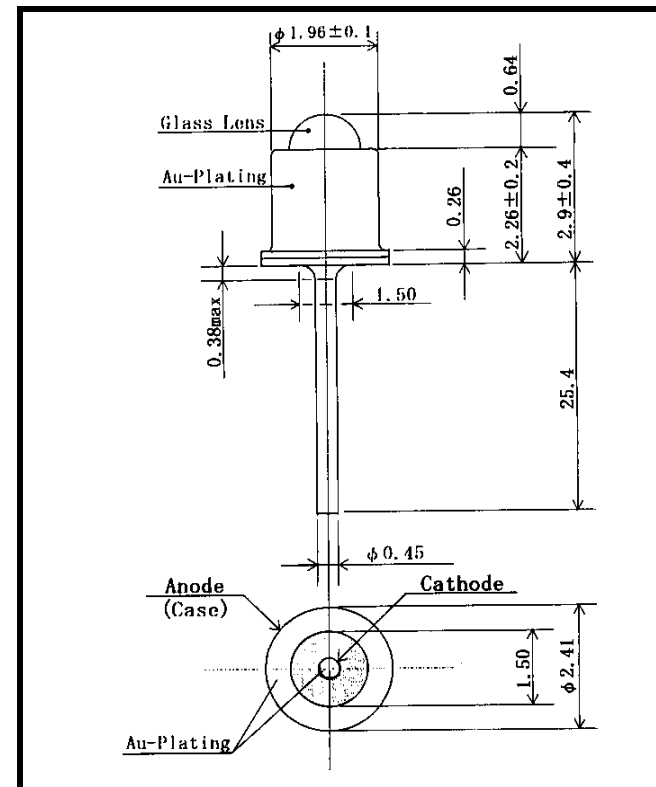


LS879PT

Point Source LED



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	p	IF=50mA	850	880		nm
Spectral Line Half Width		IF=50mA		45		nm
Half Intensity Beam Angle		IF=50mA		±3.5		deg.
Cut-Off Frequency	fc	IFP=50mA+20mA _{p-p}		6		MHz
Junction Capacitance	Cj	1MHz, V=0V		65		pF
Temp. Coefficient of PO	P/T	IF=10mA		-0.05		%/
Temp. Coefficient of VF	V/T	IF=10mA		-1.6		mV/

- FEATURES**
- Point-Source LED
 - Emitting Window Dia. 150 μm
 - High-output Power
 - Narrow Beam (Super Excellent)
 - Small Temp. Coefficient of PO
 - Compact (2mm)

- APPLICATIONS**
- Optical Switches
 - Edge Sensing (Coin Dispenser)

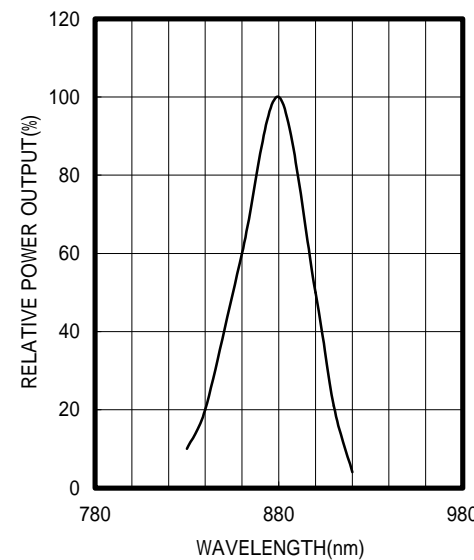
1. ABSOLUTE MAXIMUM RATINGS (Ta=25 °C)

ITEM	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	80	mA
Forward Current (Pulse)*1	IFP	0.4	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	140	mW
Operating Temp.	Topr	-20 TO 85	
Storage Temp.	Tstg	-30 TO 100	
Junction Temp.	Tj	100	
Lead Soldering Temp.*2	Tls	260	

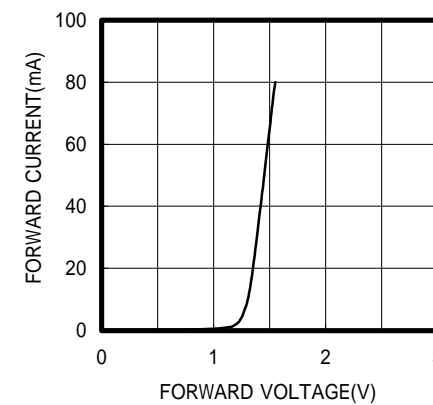
*1:Tw=10uS,T=10mS

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

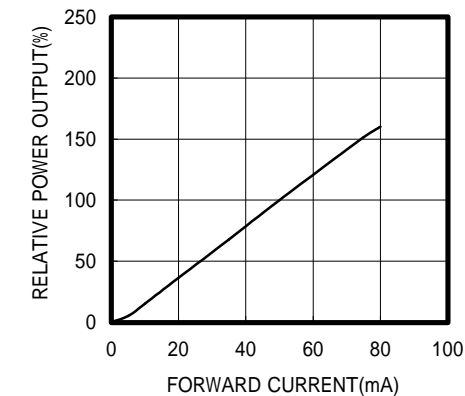
SPECTRAL OUTPUT



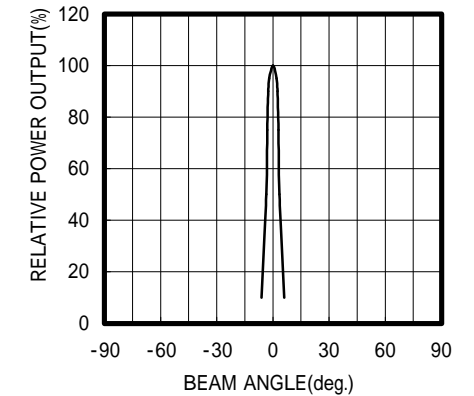
FORWARD I-V CHARACTERISTICS



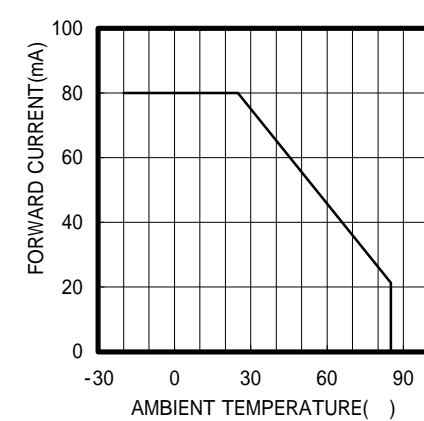
RELATIVE POWER vs FORWARD CURRENT



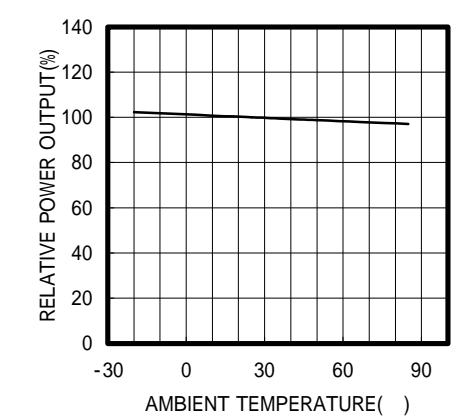
RADIATION PATTERN



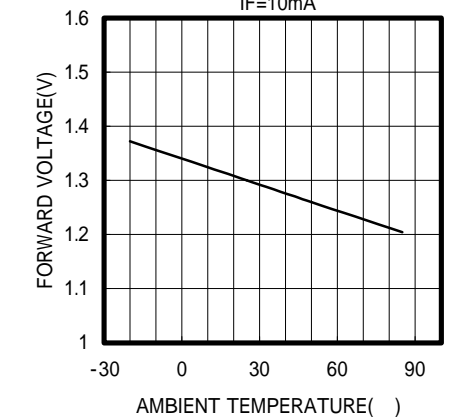
THERMAL DERATING CURVE



POWER OUTPUT vs TEMPERATURE IF=10mA



FORWARD VOLTAGE vs TEMPERATURE IF=10mA



OPTRANS

2-6-11 MASUKATA, TAMA-KU, KAWASAKI 214-0032. JAPAN
 TEL.81(44)932-6491 / FAX.81(44)932-8281
 E-mail optrans@mb.kcom.ne.jp