

- FEATURES**
- High-output Power
 - Parallel Rays (Super Excellent)
 - Narrow Beam (Super Excellent)
 - Point-source LED
 - Small Temp. Coefficient of PO
- APPLICATIONS**
- Optical Switches
 - Linear & Rotary Encoder

1. ABSOLUTE MAXIMUM RATINGS

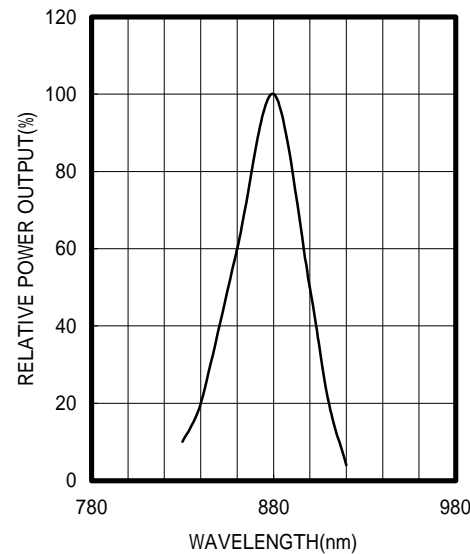
ITEM	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	100	mA
Forward Current (Pulse)*1	IFP	0.8	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	180	mW
Operating Temp.	Topr	-30 TO 100	
Storage Temp.	Tstg	-40 TO 125	
Junction Temp.	Tj	125	
Lead Soldering Temp.*2	Tls	260	

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

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

Dimensions (Unit:mm)

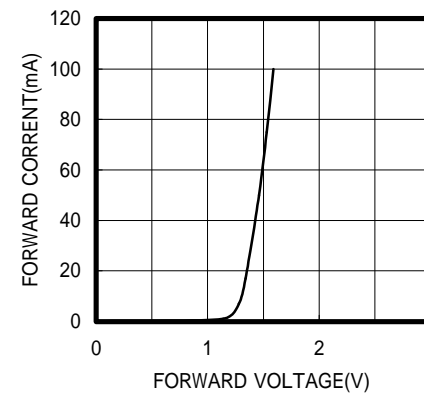
SPECTRAL OUTPUT



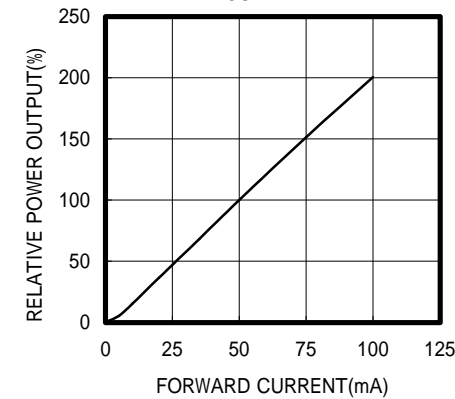
2. ELECTRICAL & OPTICAL CHARACTERISTICS (Ta=25)

ITEM	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=50mA	1.6	2.7		mW
Forward Voltage	VF	IF=50mA		1.45	1.8	V
Reverse Current	IR	VR=5V			10	μA
Peak Wavelength	λ	IF=50mA	850	880		nm
Spectral Line Half Width		IF=50mA		45		nm
Half Intensity Beam Angle		IF=50mA		±2.5		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/

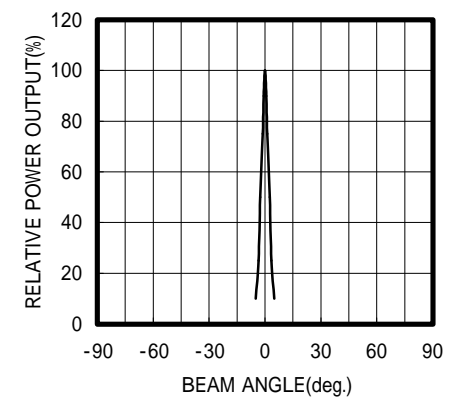
FORWARD I-V CHARACTERISTICS



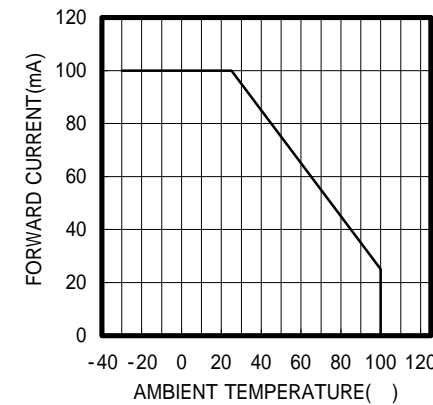
RELATIVE POWER vs FORWARD CURRENT



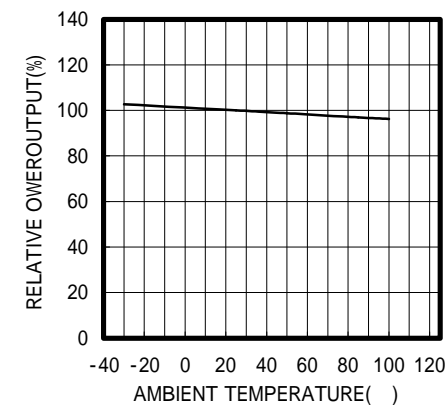
RADIATION PATTERN



THERMAL DERATING COVE



POWER OUTPUT vs TEMPERATURE IF=10mA



FORWARD VOLTAGE vs TEMPERATURE IF=10mA

