

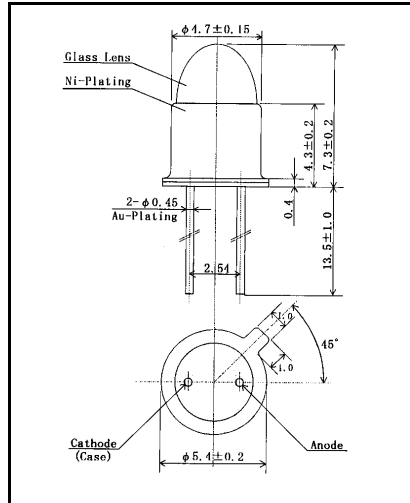
- FEATURES**
- Point-Source LED
 - Emitting Window Dia. $\phi 50\mu\text{m}$
 - High-output Power
 - Parallel Rays (Super Excellent)
 - Narrow Beam (Super Excellent)
 - Small Temp. Coefficient of PO
- APPLICATIONS**
- Linear & Rotary Encoder
 - Optical Switches

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	150	mW
Operating Temp.	Topr	-30 TO 100	°C
Storage Temp.	Tstg	-40 TO 125	°C
Junction Temp.	Tj	125	°C
Lead Soldering Temp.*2	Tls	260	°C

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

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

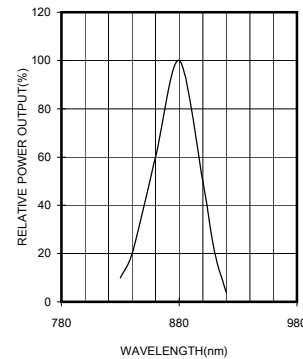


Dimensions (Unit:mm)

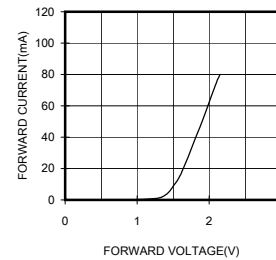
2. ELECTRICAL & OPTICAL CHARACTERISTICS (Ta=25°C)

ITEM	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=50mA	1.8	2.5		mW
Forward Voltage	VF	IF=50mA		1.9	2.4	V
Reverse Current	IR	VR=5V			10	μA
Peak Wavelength	λ_p	IF=50mA	850	880		nm
Spectral Line Half Width	$\Delta\lambda$	IF=50mA		40		nm
Half Intensity Beam Angle	θ	IF=50mA		±2		deg.
Band Width	fc	IF=50mA+20mA _{p-p}		20		MHz
Junction Capacitance	Cj	1MHz, V=0V		40		pF
Temp. Coefficient of PO	P/T	IF=10mA		-0.05		%/°C
Temp. Coefficient of VF	V/T	IF=10mA		-2.3		mV/°C

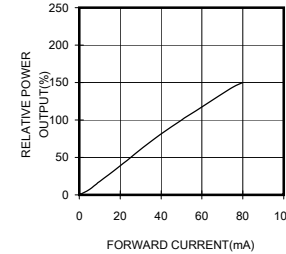
SPECTRAL OUTPUT



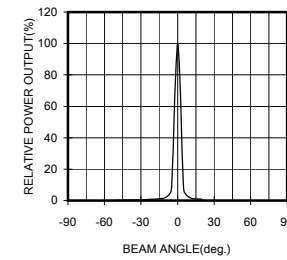
FORWARD I-V CHARACTERISTICS



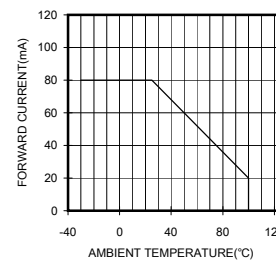
RELATIVE POWER vs FORWARD CURRENT



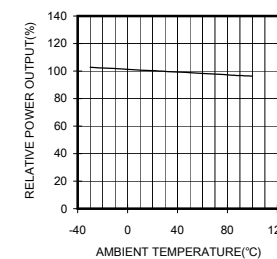
RADIATION PATTERN



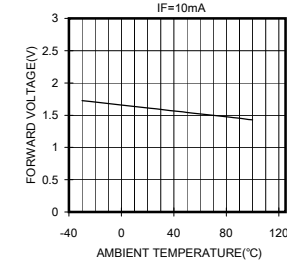
THERMAL DERATING CURVE



POWER OUTPUT vs TEMPERATURE
IF=10mA



FORWARD VOLTAGE vs TEMPERATURE
IF=10mA



To purchase this part contact
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