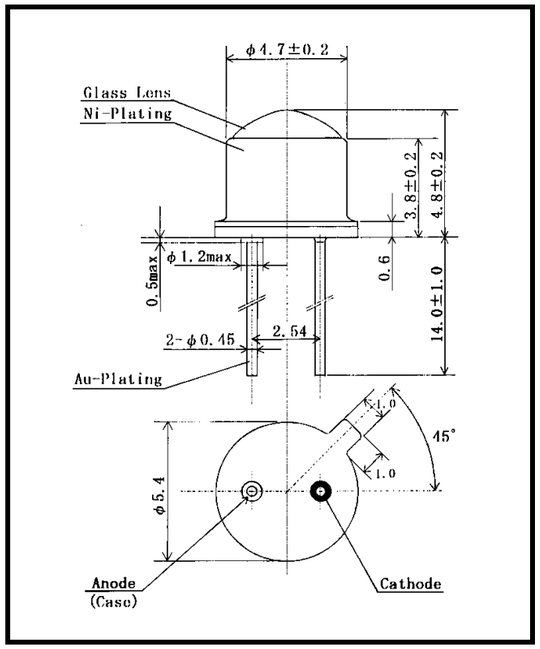
IR-870-TO-8NJ2



Dimensions (Unit:mm)

FEATURES ・High-output Power
・Parallel Rays (Excellent)
・High Reliability in Demanding Environments

APPLICATIONS ・Optical Switches
・Linear & Rotary Encoder

1. ABSOLUTE MAXIMUM RATINGS

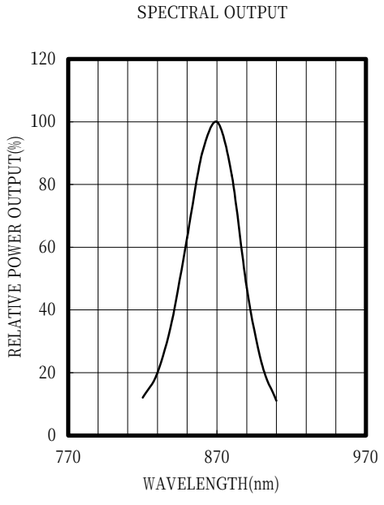
I T E M	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	100	mA
Forward Current (Pulse)*1	IFP	1	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	200	mW
Operating Temp.	Topr	-30 TO 100	℃
Storage Temp.	Tstg	-40 TO 125	℃
Junction Temp.	Tj	125	℃
Lead Soldering Temp.*2	Tls	260	℃

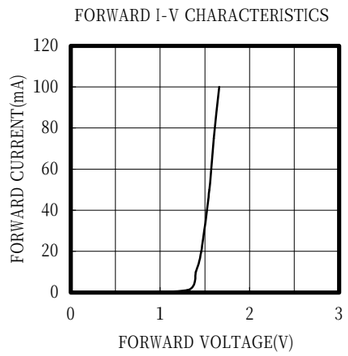
*1:Tw=10uS,T=10mS

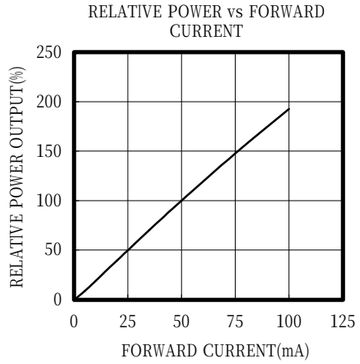
*2:Time 5 Sec max,Position:Up to 3mm from the body

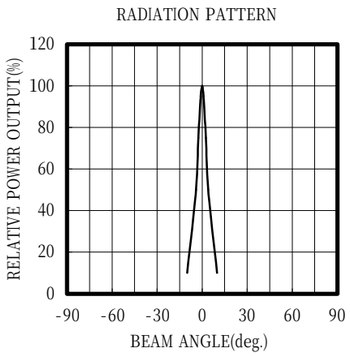
2.ELECTRICAL & OPTICAL CHARACTERISTICS (Ta=25℃)

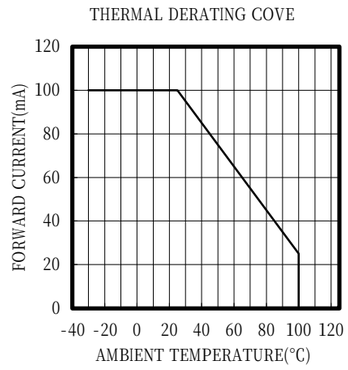
I T E M	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=50mA		6.5		mW
Forward Voltage	VF	IF=50mA		1.55	2.0	V
Reverse Current	IR	VR=5V			10	μA
Peak Wavelength	λp	IF=50mA		870		nm
Spectral Line Half Width	Δλ	IF=50mA		45		nm
Half Intensity Beam Angle	θ	IF=50mA		±4		deg.
Cut-Off Frequency	fc	IFP=50mA ±10mAp-p		12.0		MHz
Junction Capacitance	Cj	1MHz ,V=0V		50		pF
Temp. Coefficient of PO	P/T	IF=10mA		-0.3		%/℃
Temp. Coefficient of VF	V/T	IF=10mA		-2.1		mV/℃

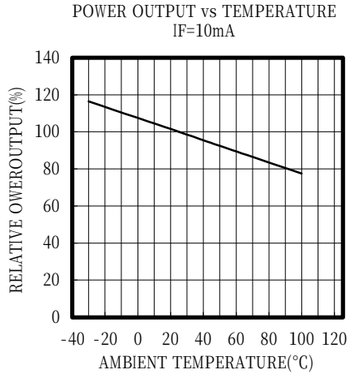


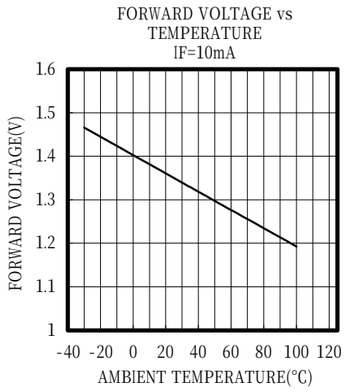












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