

MTPS4088P

Features

Emitting Window Diameter 50 μ m
High Power Output
Parallel Rays
Narrow Beam Angle
Small Temp. Coefficient of PO

Applications

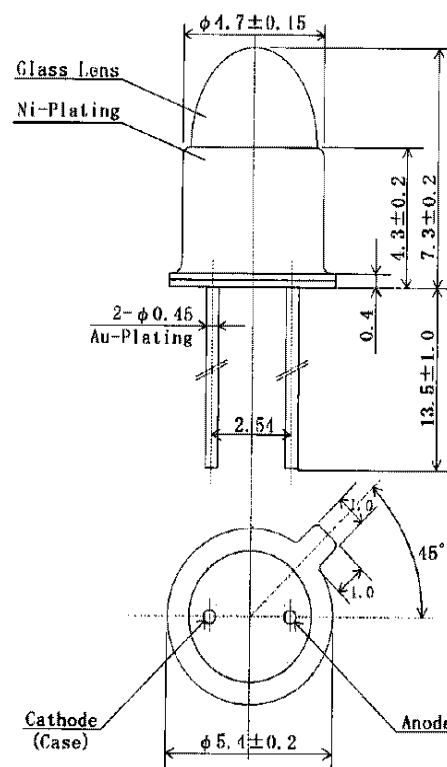
Linear Rotary Encoder
Optical Switches

Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Max.	Test Condition	Unit
Forward Current	I _F	80	—	mA
Pulsed Forward Current	I _{FP}	.40	tw=10 μ s, T=10ms	A
Reverse Voltage	V _R	5	—	V
Power Dissipation	P _D	150.00	—	mW
Operating Temperature	T _{opr}	-30 ~ +80	—	°C
Storage Temperature	T _{stg}	-40 ~+100	—	°C
Junction Temperature	T _j	125	—	°C
Soldering Temperature	T _{sol}	260	for 5 sec. max	°C

Opto-Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V _F	I _F =50mA	—	1.90	2.40	V
Reverse Current	I _R	V _R =5V	—	—	10	μ A
Power Output	PO	I _F =50mA	1.80	2.50	—	mW
Half Intensity Beam Angle	θ	—	—	$\pm 2^\circ$	—	deg.
Peak Wavelength	λ_p	I _F =50mA	—	880	—	nm
Spectral Line Half Width	$\Delta\lambda$	I _F =50mA	—	40	—	nm
Temp Coefficient of PO	P/T	I _F =10mA	—	-.05	—	%/°C
Temp Coefficient of V _F	V/T	I _F =10mA	—	-2.30	—	mV/°C
Junction Capacitance	C _j	1 MHz, V=0V	—	40	—	pF
Cut-Off Frequency	f _c	I _{FP} =50mA+20mA _{p-p}	—	20	—	MHz



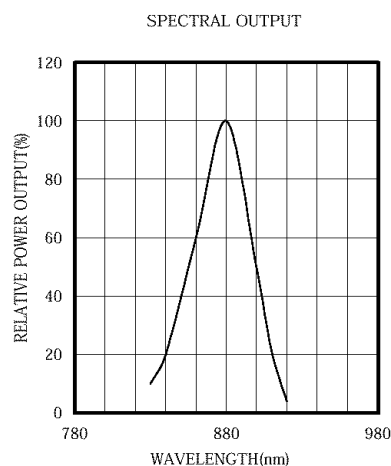
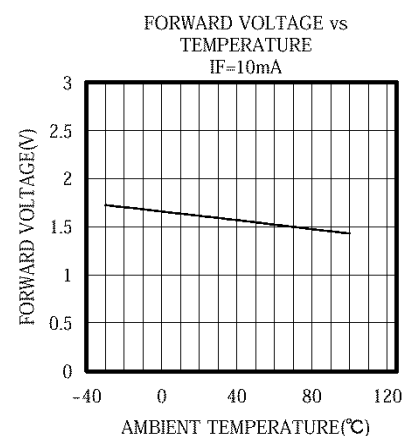
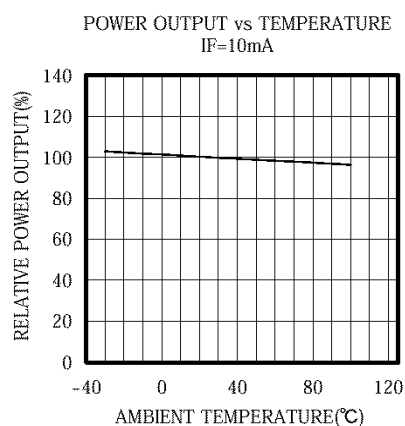
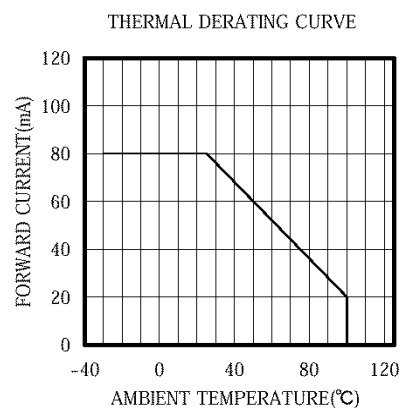
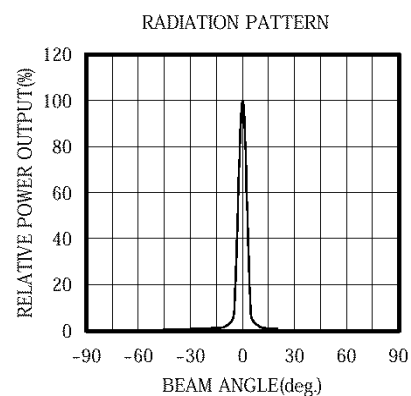
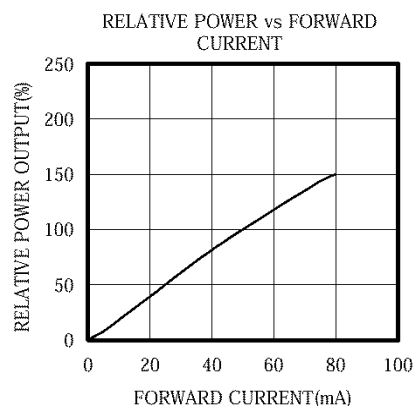
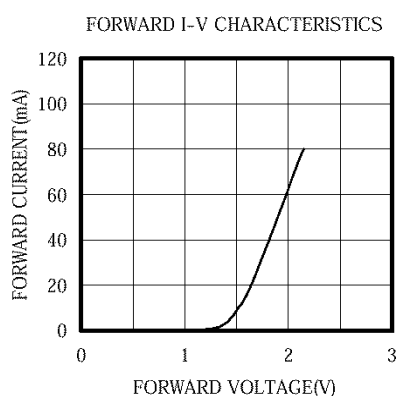
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MTE4088P Graphs



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