

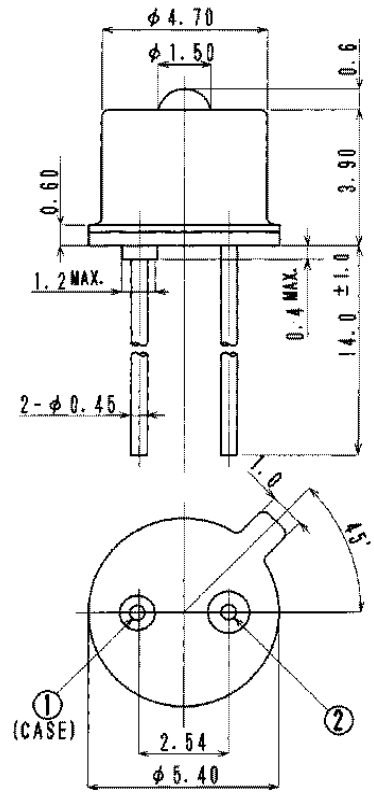
## MTPS4088NP1

### Features

Double Lens – Ball Lens and Focusing Lens  
 High Output Power  
 Point Source LED  
 Emitting Window Diameter 50µm

### Applications

Optical Communications  
 Fiber Optics



① Cathode      ② Anode

### Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Max.	Test Condition	Unit
Forward Current	I <sub>F</sub>	80	–	mA
Pulsed Forward Current	I <sub>FP</sub>	.40	tw=10µS, T=10mS	A
Reverse Voltage	V <sub>R</sub>	5	–	V
Power Dissipation	P <sub>D</sub>	150.00	–	mW
Operating Temperature	T <sub>opr</sub>	–30 ~ +80	–	°C
Storage Temperature	T <sub>stg</sub>	–40 ~ +100	–	°C
Junction Temperature	T <sub>j</sub>	125	–	°C
Soldering Temperature	T <sub>sol</sub>	260	for 5 sec. max	°C

### Opto-Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =50mA	–	1.90	2.40	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	–	–	10	µA
Power Output	PO	I <sub>F</sub> =50mA	1.70	2.80	–	mW
Half Intensity Beam Angle	θ	–	–	± 10°	–	deg.
Peak Wavelength	λ <sub>p</sub>	I <sub>F</sub> =50mA	–	880	–	nm
Spectral Line Half Width	Δλ	I <sub>F</sub> =50mA	–	80	–	nm
Temp Coefficient of PO	P/T	I <sub>F</sub> =10mA	–	–.50	–	%/°C
Temp Coefficient of VF	V/T	I <sub>F</sub> =10mA	–	–2.30	–	mV/°C
Junction Capacitance	C <sub>j</sub>	1MHz, V=0V	–	40	–	pF
Cut-Off Frequency	f <sub>c</sub>	I <sub>FP</sub> =50mA+20mAp-p	--	20	–	MHz

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## MTPS4088NP1 Graphs

