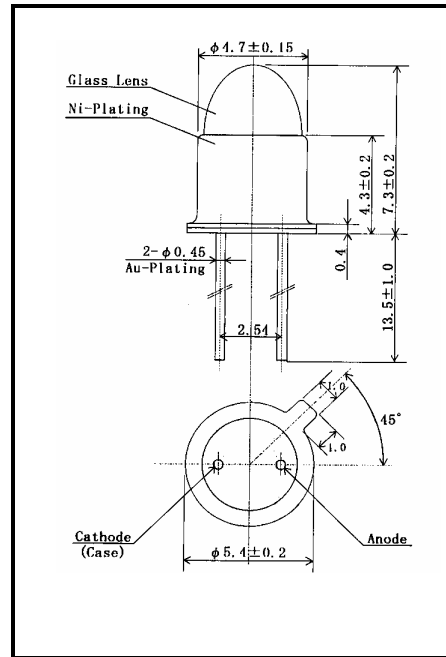


# MTPS8085P

## Point Source LED



Dimensions (Unit:mm)

- 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 (Ta=25 °C)

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	190	mW
Operating Temp.	Topr	-30 TO 100	
Storage Temp.	Tstg	-40 TO 125	

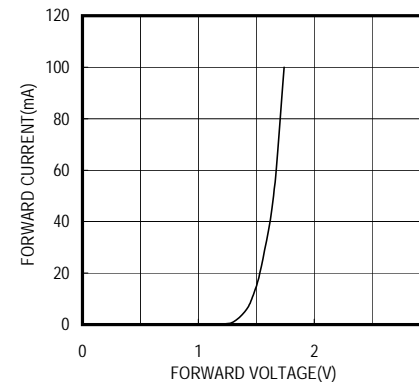
\*1: Tw=10uS, T=10mS

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

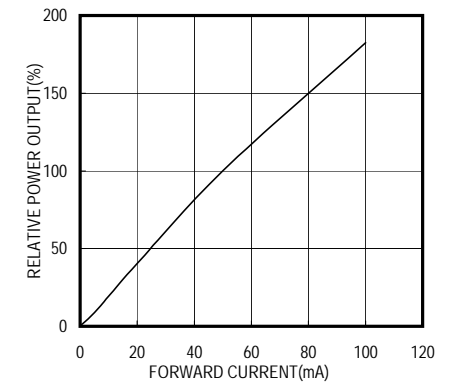
### 2. ELECTRICAL & OPTICAL CHARACTERISTICS (Ta=25 °C)

ITEM	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=50mA	1.8	3.2		mW
Forward Voltage	VF	IF=50mA		1.7	2.2	V
Reverse Current	IR	VR=5V			10	μA
Peak Wavelength	λp	IF=50mA		855		nm
Spectral Line Half Width		IF=50mA		30		nm
Half Intensity Beam Angle		IF=50mA		±2.5		deg.

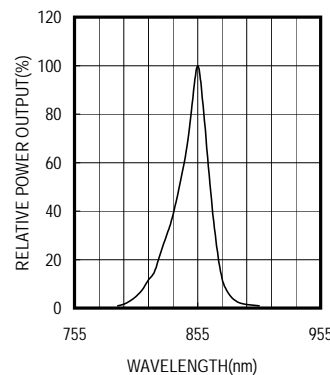
FORWARD I-V CHARACTERISTICS



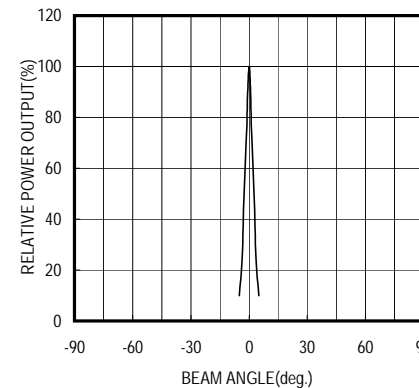
RELATIVE POWER vs FORWARD CURRENT



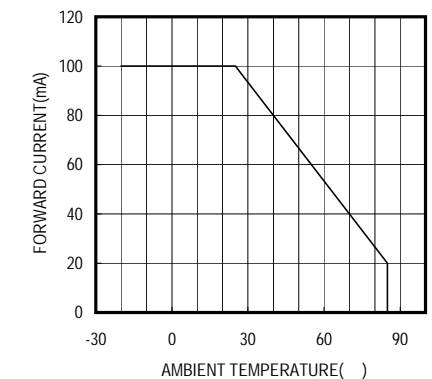
SPECTRAL OUTPUT



RADIATION PATTERN



THERMAL DERATING CURVE



To purchase this part contact  
Marktech Optoelectronics at  
**800.984.5337**

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