

## Peak Emission Wavelength: 880nm

The MTE8080PP consists of a 880nm infrared die in a super compact 1.5 Dia. pill package. Custom package solutions and sorting are available.

### FEATURES

- > High Output Power
- > Narrow Beam Angle
- > Super Compact (1.55 Dia.)

### APPLICATIONS

- > Optical Switches & Sensors
- > Smoke Detectors



## Absolute Maximum Ratings (Ta=25°C)

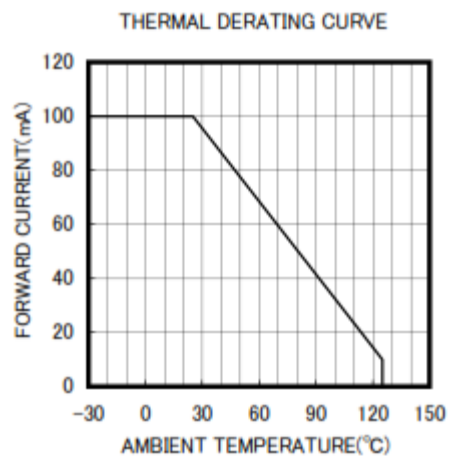
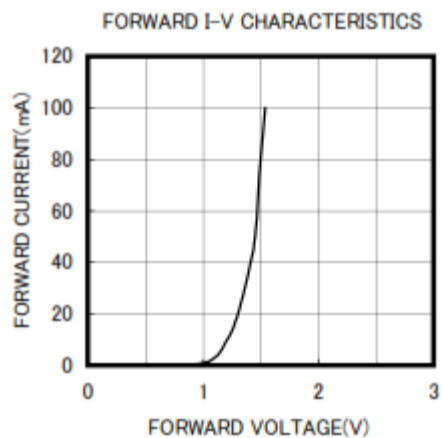
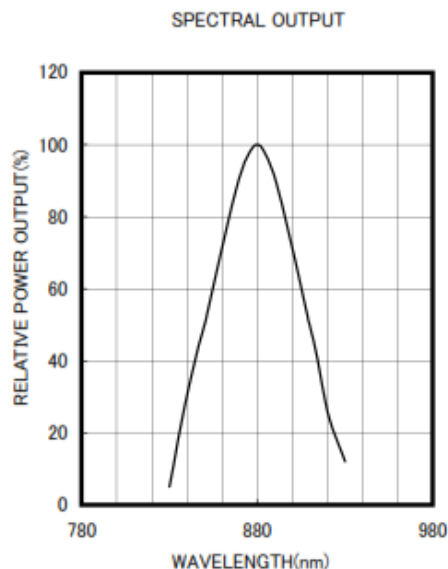
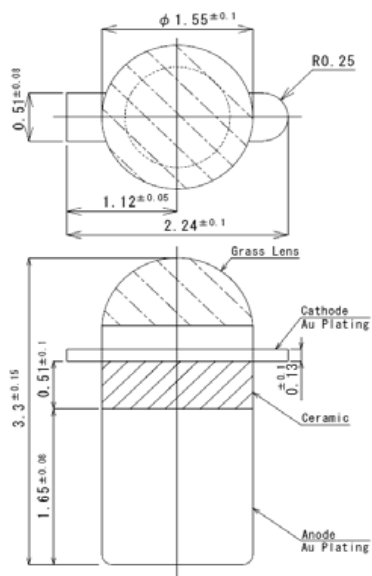


ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	100	mA
Forward Current (Pulse)*1	IFP	1	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	150	mW
Operating Temperature Range	Topr	-30 ~ +125	°C
Storage Temperature Range	Tstg	-40 ~ +125	°C
Junction Temperature	Tj	125	°C
Lead Soldering Temperature*2	Tls	260	°C

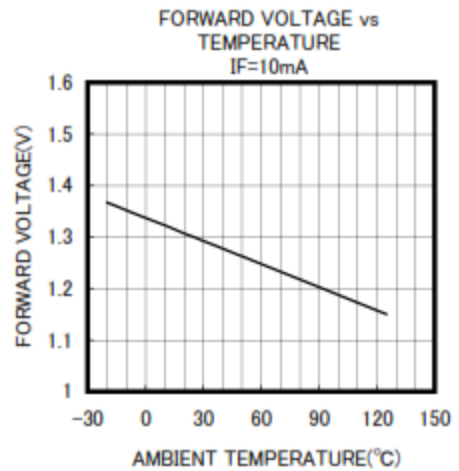
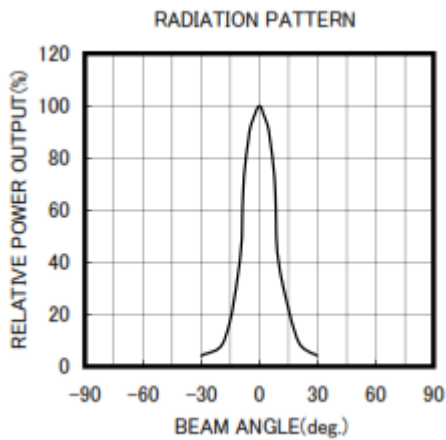
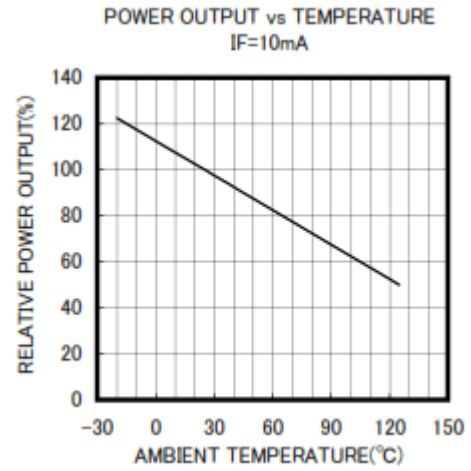
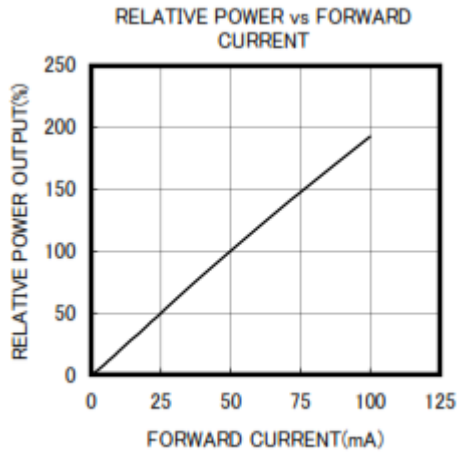
\*1: Tw=10µsec, T=10msec. \*2: Time 3Sec max, Position: Up to 1mm from the body.

## Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=50mA	1.5	2.5	--	mW
Forward Voltage	VF	IF=50mA	--	1.45	1.8	V
Reverse Current	IR	VR=5V	--	--	10	µA
Peak Emission Wavelength	λp	IF=50mA	--	880	--	nm
Spectral Line Half Width	Δλ	IF=50mA	--	60	--	nm
Half Intensity Beam Angle	Θ	IF=50mA	--	±9	--	deg
Switching Times	Tr, Tf	IF=50mA	--	1.5, 0.8	--	uS
Temperature Coefficient Po		IF=10mA	--	-0.5	--	%/°C
Temperature Coefficient Vf		IF=10mA	--	-1.5	--	mV/°C



Unit: mm, Tolerance:  $\pm 0.2$



The information contained herein is subject to change without notice.

2021-02-23