

## Peak Emission Wavelength: 680nm

The MTE6800N2-UR is a red, 5mm water clear emitter designed for applications requiring flat top, high power output and high reliability in a wide angle package.

### FEATURES

- > High Reliability
- > High Output Power

### APPLICATIONS

- > Optical Sensors
- > Optical Switches
- > Medical Application



## Absolute Maximum Ratings (Ta=25°C)

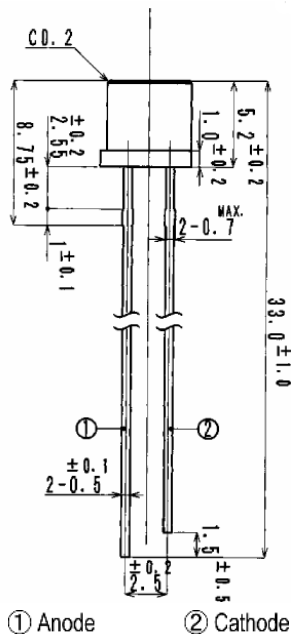


ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	50	mA
Forward Current (Pulse)*1	IFP	0.5	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	110	mW
Operating Temperature Range	Topr	-20 ~ +80	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C
Junction Temperature	Tj	100	°C
Lead Soldering Temperature*2	Tls	260	°C

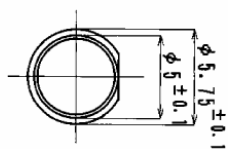
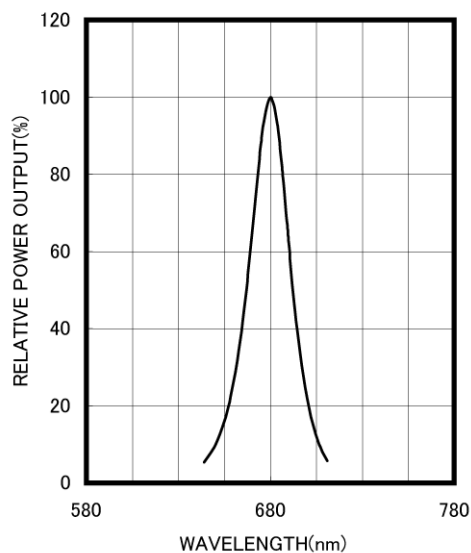
\*1: Tw=10μsec, T=10msec; \*2: Time 3 Sec max, Position: Up to 2mm from the body.

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

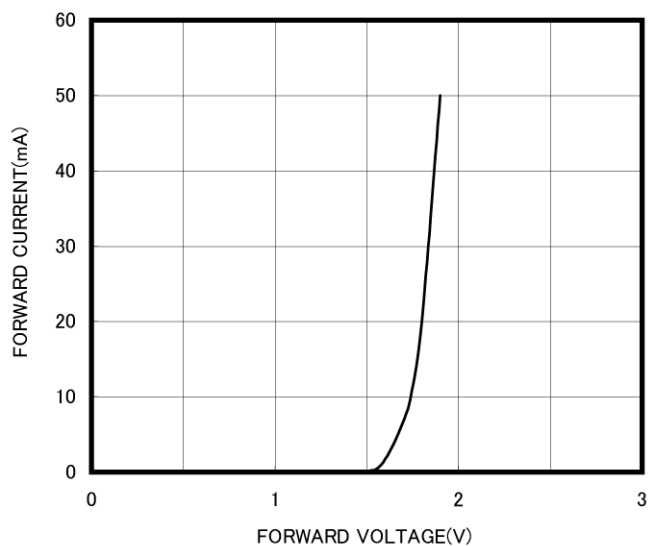
ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA	--	5.5	--	mW
Forward Voltage	VF	IF=20mA	--	1.8	1.95	V
Reverse Current	IR	VR=5V	--	--	10	μA
Peak Emission Wavelength	λp	IF=20mA	--	680	--	nm
Spectral Line Half Width	Δλ	IF=20mA	--	30	--	nm
Half Intensity Beam Angle	Θ	IF=20mA	--	±35	--	deg



SPECTRAL OUTPUT

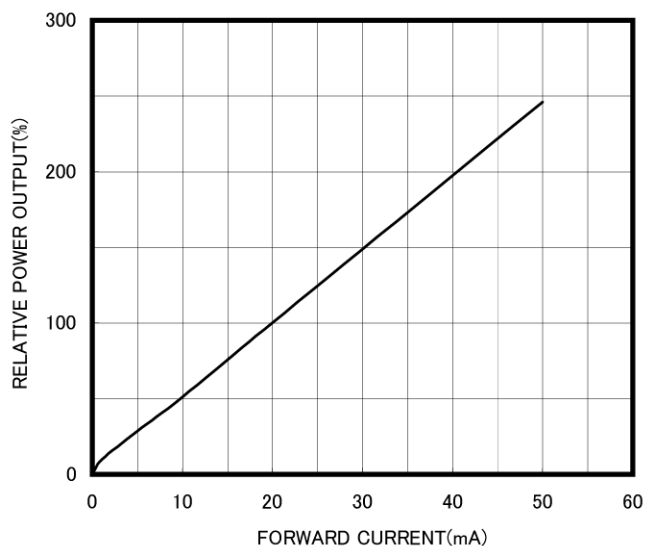


FORWARD I-V CHARACTERISTICS

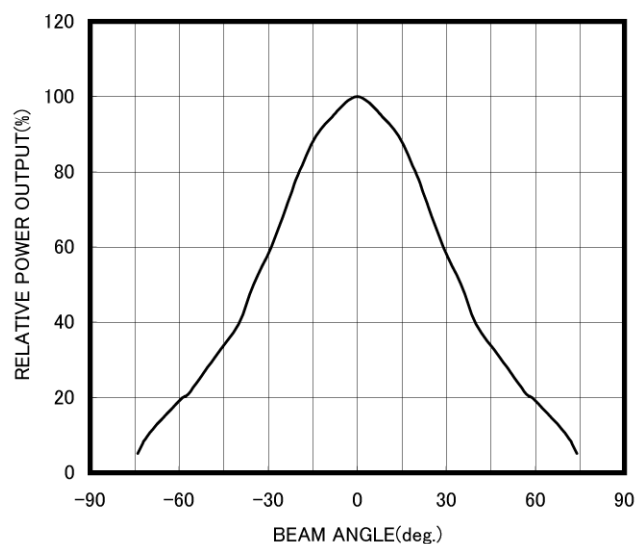


Unit: mm, Tolerance:  $\pm 0.2$

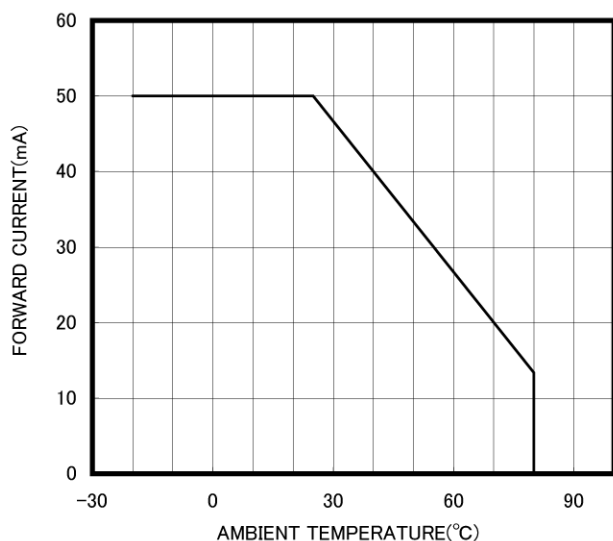
RELATIVE POWER vs FORWARD CURRENT



RADIATION PATTERN



THERMAL DERATING CURVE



The information contained herein is subject to change without notice.

2012-05-17