

## Peak Emission Wavelength: 470nm

The MTE4047C5-UB is a blue T 1, 3mm water clear emitter designed for applications requiring high power output and high reliability in a wide angle package. It can be custom sorted for specific power output ranges.

### FEATURES

- > High Output Power
- > High Reliability

### APPLICATIONS

- > Optical Sensors
- > Fiber Optical Communications
- > Indicators



## Absolute Maximum Ratings (Ta=25°C)

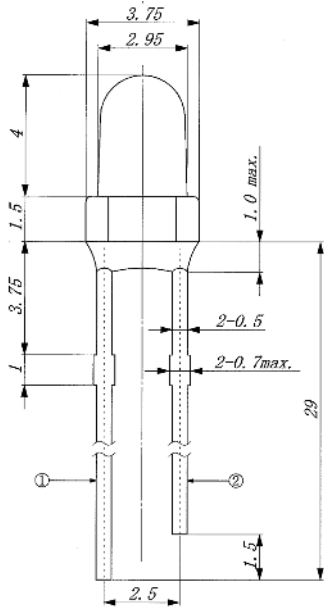


ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	30	mA
Forward Current (Pulse)*1	IFP	0.3	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	120	mW
Operating Temperature Range	Topr	-20 ~ +80	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C
Junction Temperature	Tj	100	°C
Lead Soldering Temperature*2	Tls	260	°C

\*1: Tw=10µsec, T=10msec; \*2: Time 5 Sec max, Position: Up to 3mm from the body.

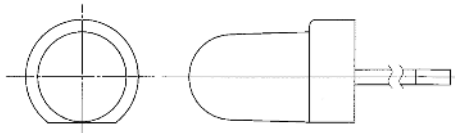
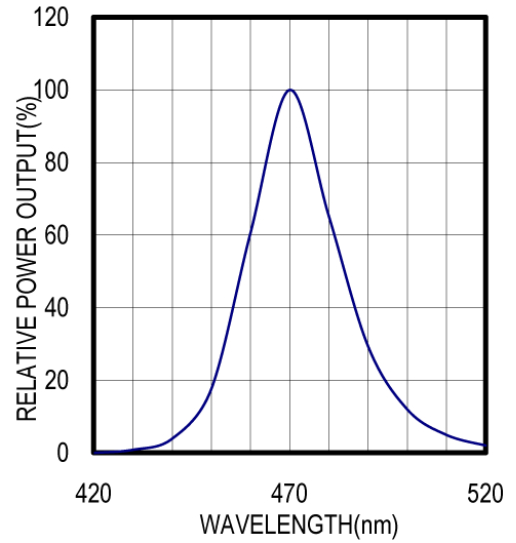
## Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA	--	15.0	--	mW
Luminous Intensity	Iv	IF=20mA	--	3600	--	mcd
Forward Voltage	VF	IF=20mA	--	3.0	3.5	V
Reverse Current	IR	VR=5V	--	--	100	µA
Peak Emission Wavelength	λp	IF=20mA	--	470	--	nm
Spectral Line Half Width	Δλ	IF=20mA	--	20	--	nm
Half Intensity Beam Angle	Θ	IF=20mA	--	±20	--	deg

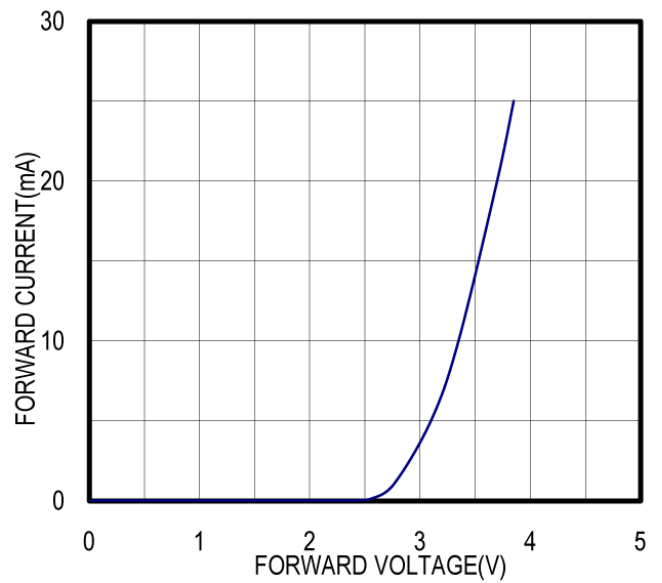


- ① Anode
- ② Cathode

SPECTRAL OUTPUT

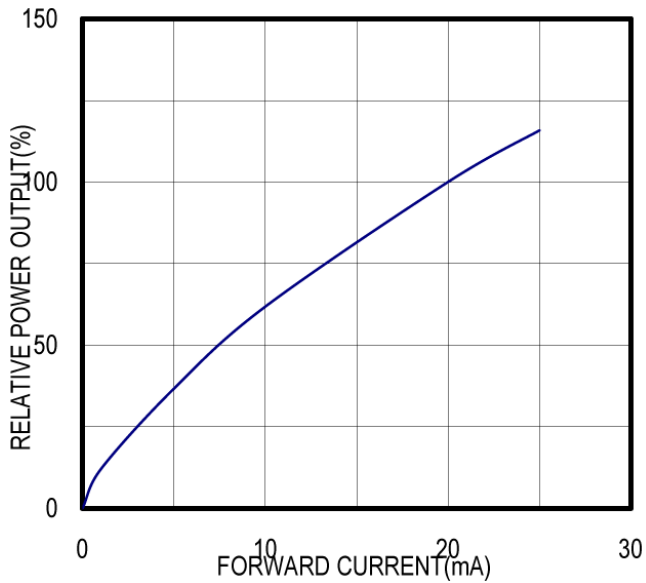


FORWARD I-V CHARACTERISTICS

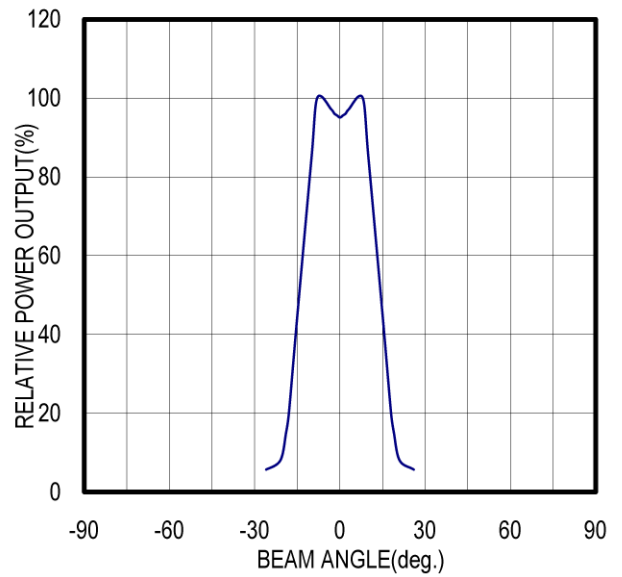


Unit: mm, Tolerance:  $\pm 0.2$

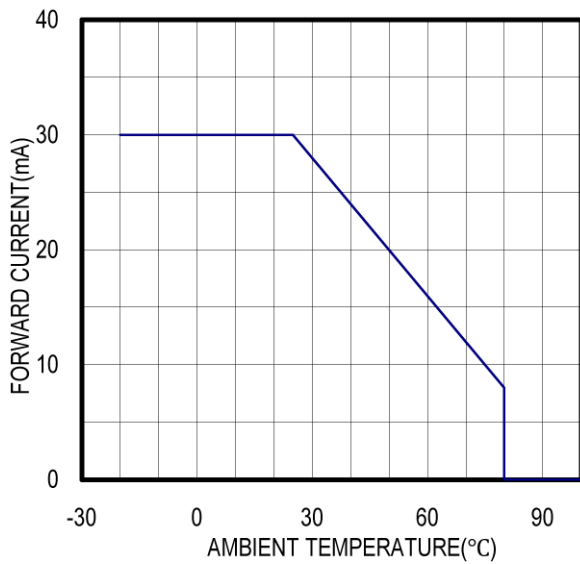
RELATIVE POWER vs FORWARD CURRENT



RADIATION PATTERN



THERMAL DERATING CURVE



The information contained herein is subject to change without notice.

2013-01-18