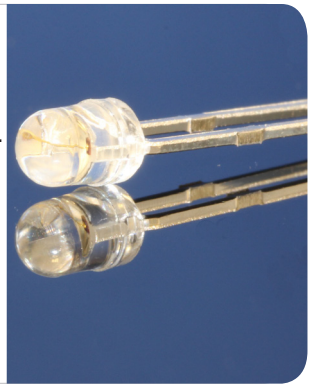
Marktech Optoelectronics

Visible Red Emitter

Product No: **MTE5066CJ-UR**

Peak Emission Wavelength: 660nm

The MTE5066CJ-UR is a red T 1, 3mm water clear emitter designed for applications requiring high power output and high reliability in a narrow angle package. It can be custom sorted for specific power output ranges.



FEATURES

> High Reliability
> High Power Output
> Compact

APPLICATIONS

> Optical Sensing
> Optical Instruments
> Linear & Rotary Encoder
> Machine Vision / CCD

Absolute Maximum Ratings (Ta=25°C)

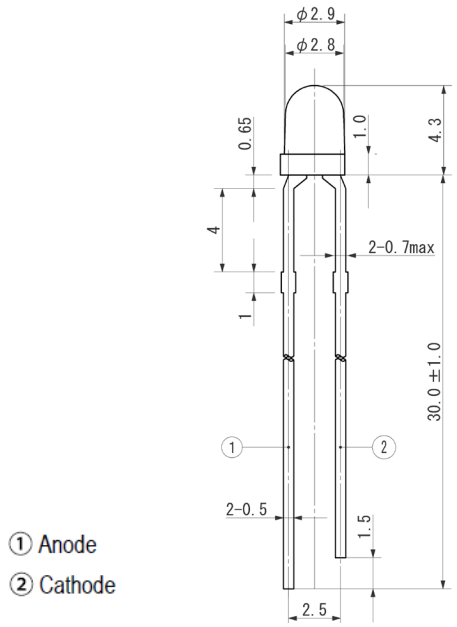
ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	50	mA
Forward Current (Pulse)*1	IFP	0.5	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	110	mW
Operating Temperature Range	Topr	-20 ~ +80	°C
Storage Temperature Range	Tstg	-30 ~ +100	°C
Junction Temperature	Tj	100	°C
Lead Soldering Temperature*2	Tls	260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

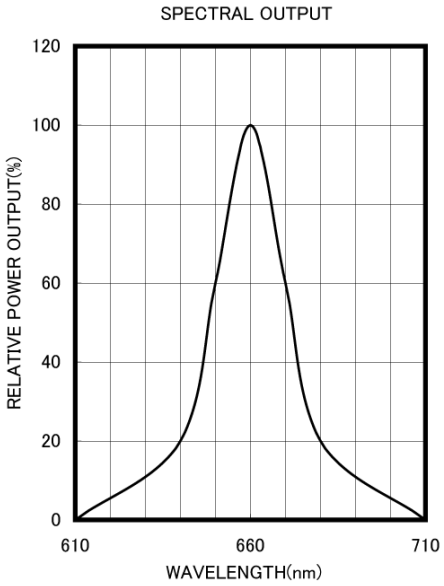
*1: Tw=10μsec, T=10msec; *2: Time 5 Sec max, Position: Up to 3mm from the body.

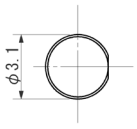
Electrical & Optical Characteristics (Ta = 25°C)

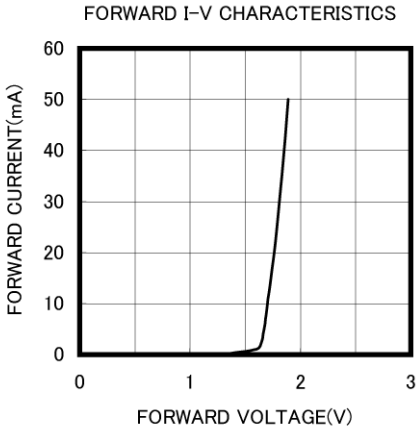
ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA	5.0	7.0	--	mW
Forward Voltage	VF	IF=20mA	--	1.8	2.2	V
Reverse Current	IR	VR=5V	--	--	100	μA
Peak Emission Wavelength	λp	IF=20mA	--	660	--	nm
Spectral Line Half Width	Δλ	IF=20mA	--	25	--	nm
Half Intensity Beam Angle	Θ	IF=20mA	--	±18	--	deg
Rise Time	Tr	IFP=20mA	--	30	--	nS
Fall Time	Tf	IFP=20mA	--	30	--	nS
Junction Capacitance	Cj	1MHz, V=0V	--	20	--	pF
Temperature Coefficient of PO	P/T	IF=10mA	--	-0.5	--	%/°C
Temperature Coefficient of VF	V/T	IF=10mA	--	-1.5	--	mV/°C

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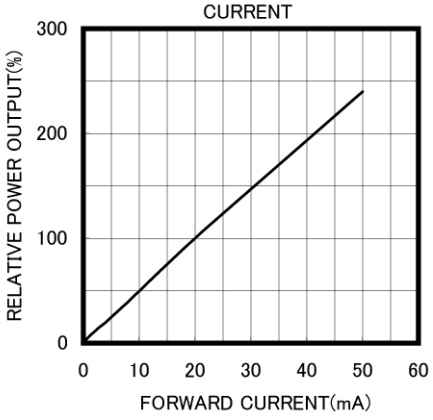




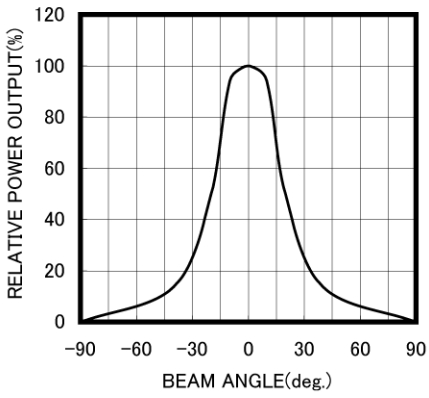
Unit: mm, Tolerance: ±0.2

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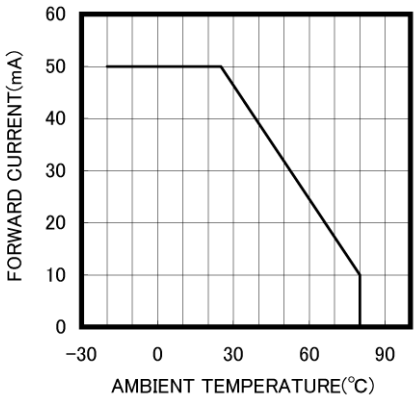
RELATIVE POWER vs FORWARD CURRENT



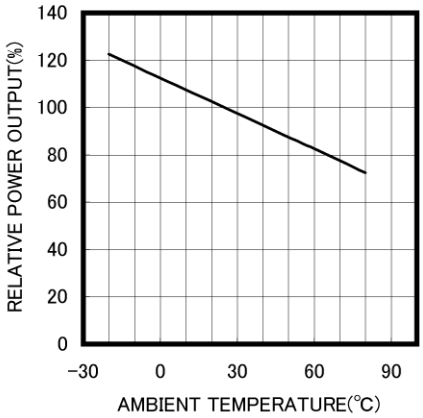
RADIATION PATTERN



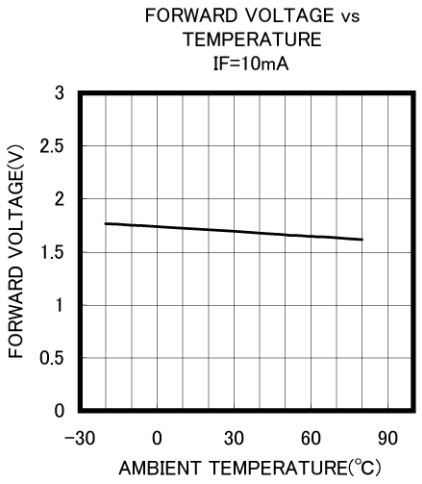
THERMAL DERATING CURVE



POWER OUTPUT vs TEMPERATURE
IF=10mA



2012-05-17



The information contained herein is subject to change without notice.

2012-05-17