5mm Red Visible Emitter

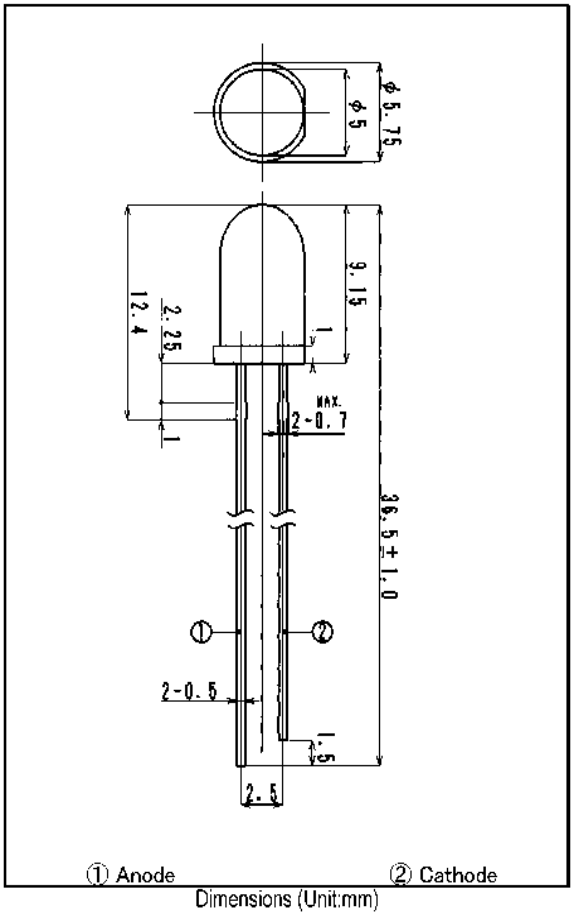
MTE7415

Features

High Output Power
Narrow Beam Angle
High Reliability

Applications

Optical Switches
Optical Sensors
Medical Applications



Dimensions (Unit:mm)

Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Max.	Test Condition	Unit
Forward Current	I_F	50	–	mA
Pulsed Forward Current	I_{FP}	.50	tw=10μ S, T=10mS	A
Reverse Voltage	V_R	5	–	V
Power Dissipation	P_D	120.00	–	mW
Operating Temperature	T_{opr}	−20 ~ +80	–	°C
Storage Temperature	T_{stg}	−30 ~ +100	–	°C
Junction Temperature	T_j	100	–	°C
Soldering Temperature	T_{sol}	260	for 3 sec. max	°C

Opto−Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V_F	I_F=20mA	–	1.80	2.30	V
Reverse Current	I_R	V_R=5V	–	–	100	μ A
Power Output	PO	I_F=20mA	–	4.00	–	mW
Half Intensity Beam Angle	θ	–	–	± 7°	–	deg.
Peak Wavelength	λp	I_F=20mA	–	740	–	nm
Spectral Line Half Width	Δλ	I_F=20mA	–	30	–	nm

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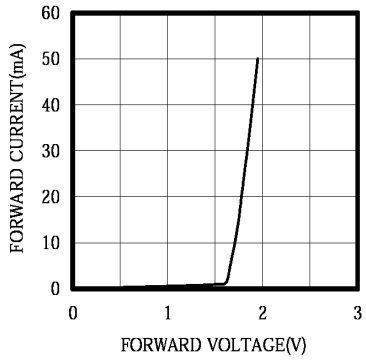
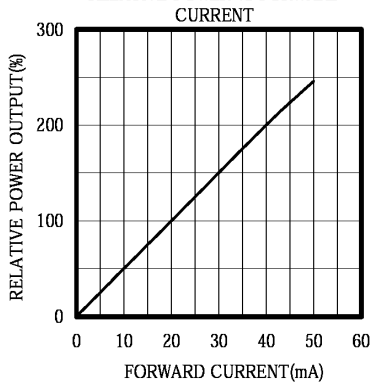
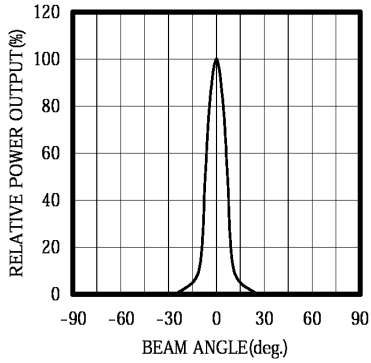
FORWARD I-V CHARACTERISTICS



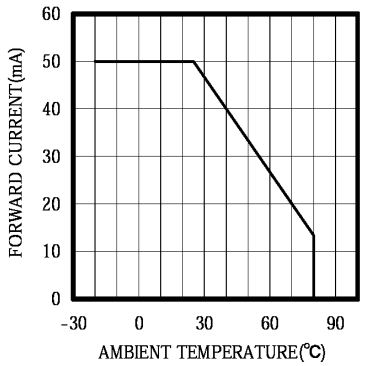
RELATIVE POWER vs FORWARD CURRENT



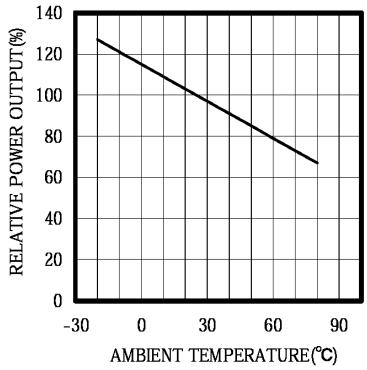
RADIATION PATTERN



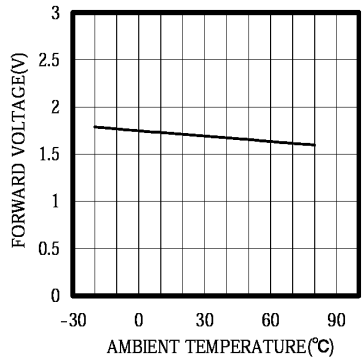
THERMAL DERATING CURVE



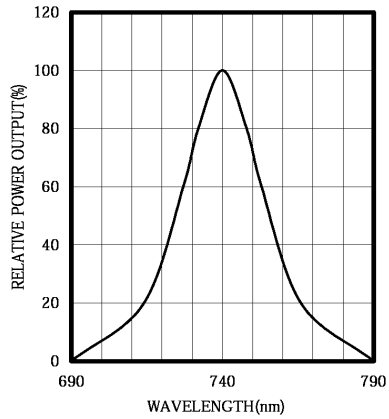
POWER OUTPUT vs TEMPERATURE
IF=10mA



FORWARD VOLTAGE vs TEMPERATURE
IF=10mA



SPECTRAL OUTPUT



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