

MTE7410

Features

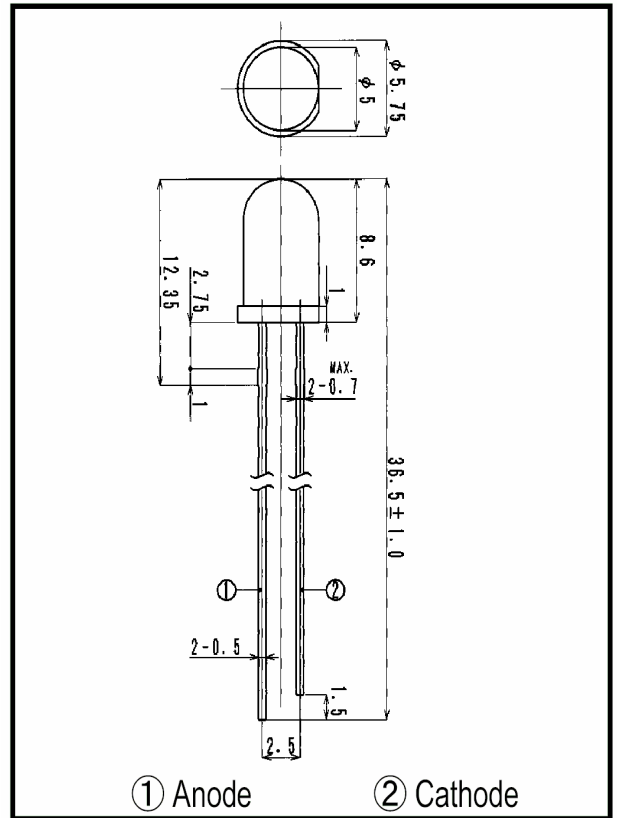
High Power Output
Narrow Beam Angle
High Reliability

Applications

Optical Switches
Optical Sensors
Medical Applications

Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Max.	Test Condition	Unit
Forward Current	I _F	50	–	mA
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



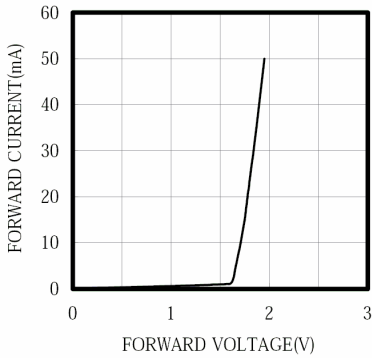
Dimensions (Unit:mm)

Opto-Electrical Characteristics (Ta=25°C)

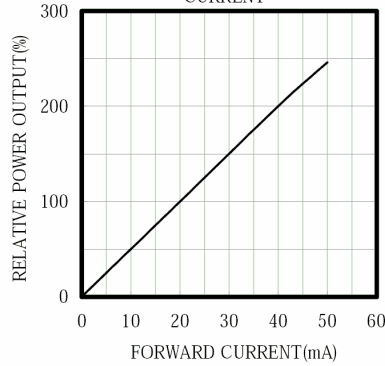
Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V _F	I _F =20mA	–	1.80	2.30	V
Reverse Current	I _R	V _R =5V	–	–	100	μA
Power Output	PO	I _F =20mA	–	4.00	–	mW
Half Intensity Beam Angle	θ	–	–	± 12°	–	deg.
Peak Wavelength	λ _p	I _F =20mA	–	740	–	nm
Spectral Line Half Width	Δλ	I _F =20mA	–	30	–	nm
Temp Coefficient of PO	P/T	I _F =10mA	–	–.60	–	%/°C
Temp Coefficient of VF	V/T	I _F =10mA	–	–1.90	–	mV/°C
Junction Capacitance	C _j	1 MHz, V=0V	–	35	–	pF

MTE7410 Graphs

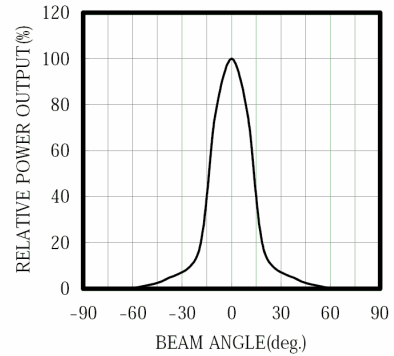
FORWARD I-V CHARACTERISTICS



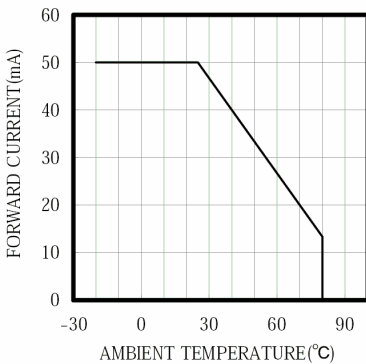
RELATIVE POWER vs FORWARD CURRENT



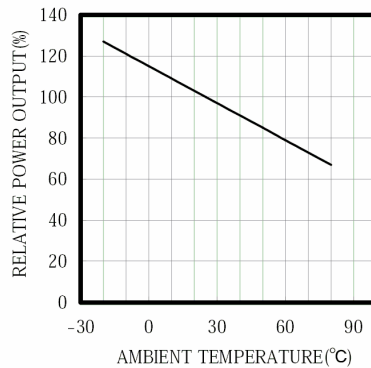
RADIATION PATTERN



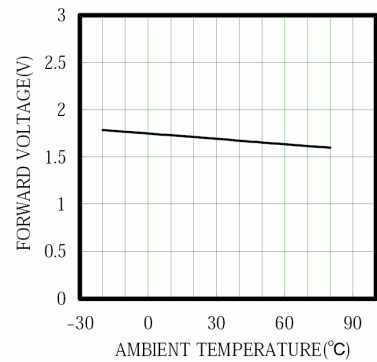
THERMAL DERATING CURVE



POWER OUTPUT vs TEMPERATURE
IF=10mA



FORWARD VOLTAGE vs TEMPERATURE
IF=10mA



SPECTRAL OUTPUT

