

# INFRARED LED

## MTE2050

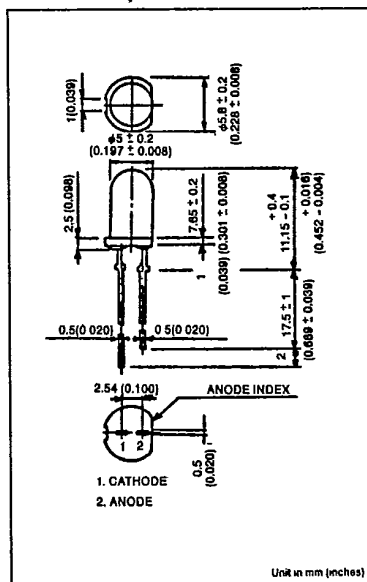
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### APPLICATIONS

- OPTICAL SWITCH

### FEATURES

- Output spectrally compatible with silicon sensor MTD6100.
- High radiant power.
- High radiant intensity.



### MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Forward Current	I <sub>F</sub>	100	mA
Reverse Voltage	V <sub>R</sub>	5	V
Peak Pulse Current*	I <sub>FP</sub>	1	A
Operating Temperature Range	T <sub>opr</sub>	-20 ~ 75	°C
Storage Temperature Range	T <sub>stg</sub>	-30 ~ 100	°C

\*Pulse width ≤ 100 μs, frequency = 100Hz.

### OPTO-ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX.	UNIT
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =50mA	—	1.5	1.9	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	—	—	10	μA
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> =50mA	14	40	—	mW/sr
Radiant Power	P <sub>O</sub>	I <sub>F</sub> =50mA	—	10	—	mW
Viewing Angle	θ <sub>HP</sub>	I <sub>F</sub> =50mA	—	± 13	—	°
Spectral Line Half Width	Δλ	I <sub>F</sub> =50mA	—	80	—	nm
Peak Wave Length	λ <sub>P</sub>	I <sub>F</sub> =50mA	—	880	—	nm
Capacitance	C <sub>T</sub>	V <sub>R</sub> =0, f=1MHz	—	17	—	pF

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