

# INFRARED LED

T-41-13

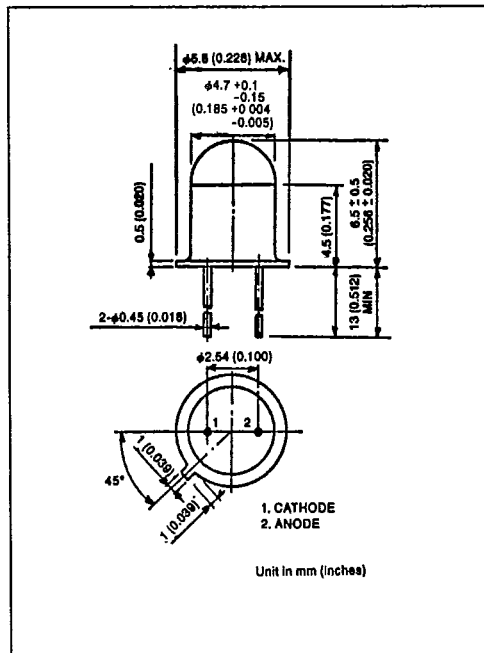
## MTE2010

### APPLICATIONS

- OPTICAL SWITCH
- TAPE, CARD READER
- AUTOMOBILE POSITION SENSOR
- PHOTO ISOLATOR

### FEATURES

- Output spectrally compatible with silicon sensor MTD6010A, MTD6140.
- High radiant intensity.
- High radiant power.
- Glass-to-metal-seal header.



### 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>	-40 ~ 125	°C
Storage Temperature Range	T <sub>stg</sub>	-55 ~ 150	°C

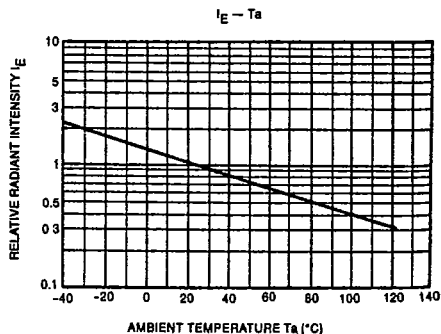
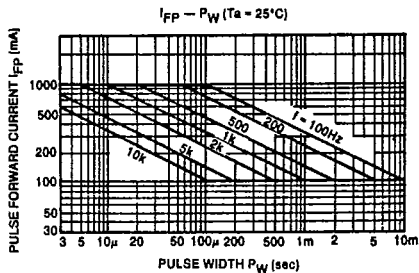
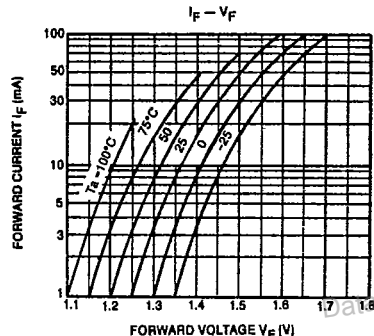
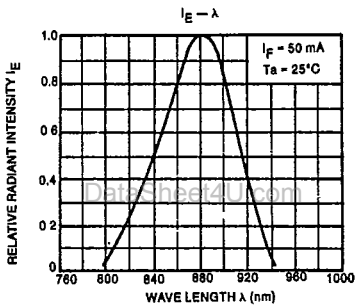
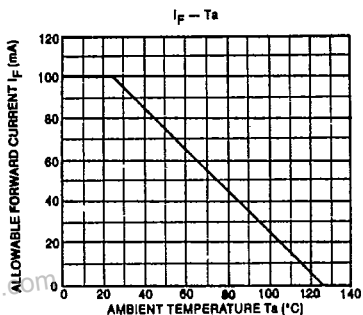
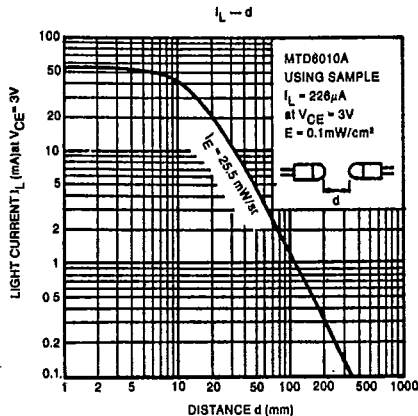
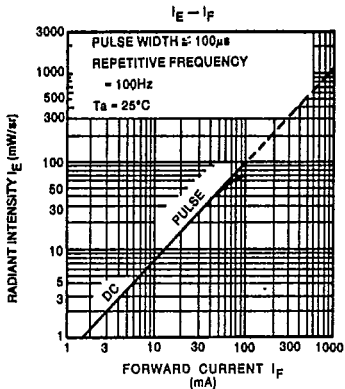
\*Pulse width &lt; 100 μs, frequency = 100Hz.

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

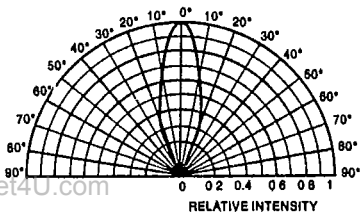
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX.	UNIT
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =50mA	—	1.5	1.9	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	—	—	10	μA
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> =50mA	20	35	—	mW/sr
Radiant Power	P <sub>O</sub>	I <sub>F</sub> =50mA	—	5	—	mW
Viewing Angle	θ <sub>HP</sub>	I <sub>F</sub> =50mA	—	± 8	—	°
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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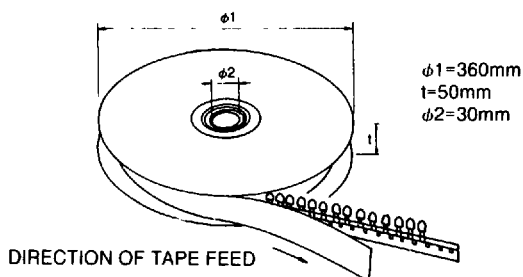
RADIATION PATTERN ( $T_a = 25^\circ C$ )



# APPLICATION NOTES

## [4] Packaging Reel Packaging

### a) Reel type



### Content

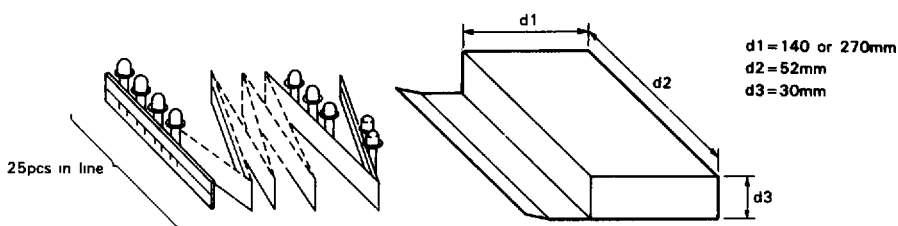
LED Type	Quantity/Reel
$\phi 3$ Series	2000 pcs
$\phi 5$ Series	1000 pcs

T-1 and T-1 3/4 packages

\*Lamps with external shapes other than those above are also available. Please consult Marktech.

### b) Zigzag wound tape

DataSheet4U.com



At tape beginning and end, there is additional space for 4 pcs or more

### Content

LED Type	Quantity/Box
$\phi 3$ Series	2000 or 5000 pcs
$\phi 5$ Series	1000 or 2000 pcs

