

REFLECTIVE SWITCH T-41-73

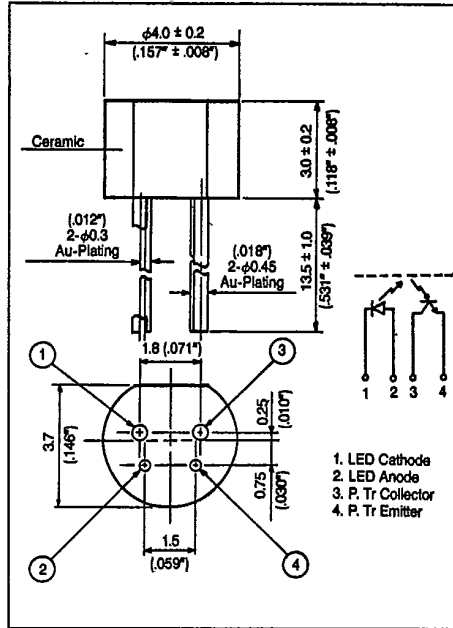
MTRS1060, MTRS1070

APPLICATIONS

- TAPE EDGE SENSOR
- PAPER POSITION SENSOR FOR PRINTERS AND FACSIMILES
- INDEX SENSOR FOR FLOPPY DISC DRIVE
- BAR CODE SCANNING

FEATURES

- Small package size.
- Fast switching speed.
- High sensitivity.
- GaAlAs visible 660nm LED and silicon detector—MTRS1060.
- GaAlAs visible 700nm LED and silicon detector—MTRS1070.



MAXIMUM RATINGS (Ta = 25°C)

	CHARACTERISTIC	SYMBOL	RATING	UNIT
A	Forward Current	I _F	50	mA
	Reverse Voltage	V _R	4	V
	Pulse Forward Current	I _{FP}	0.5*	A
	Power Dissipation	P _D	100	mW
B	Collector-Emitter Voltage	V _{CEO}	20	V
	Emitter-Collector Voltage	V _{ECO}	5	V
	Collector Current	I _C	50	mA
	Collector Power Dissipation	P _C	75	mW
C	Total Power Dissipation	P _{TOT}	100	mW
	Operating Temperature	T _{opr}	-20 ~ 90	°C
	Storage Temperature	T _{stg}	-30 ~ 100	°C

*P_W=10μs, f=100Hz

OPTO-ELECTRICAL CHARACTERISTICS (Ta = 25°C)

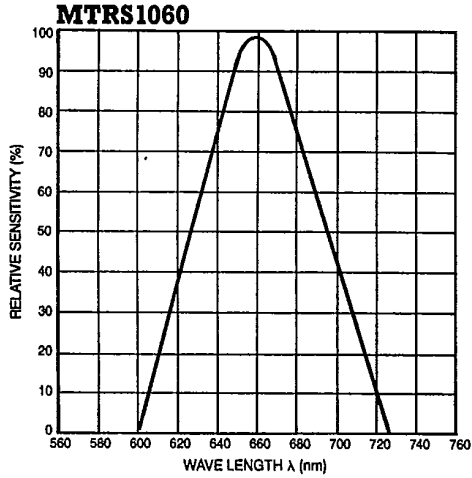
	CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
A	Forward Voltage	V _F	I _F =20mA	—	1.7	2.1	V
	Reverse Current	I _R	V _R =4V	—	—	10	μA
	Peak Wave Length	λ _p	I _F =20mA	—	660 700	—	nm
B	Collector Dark Current	I _D (I _{CEO})	V _{CE} =10V	—	—	100	nA
C	Output Current	I _O	I _F =20mA, V _{CE} =2V, d=1mm	150	300	—	μA
	Cross Talk	I _X	I _F =20mA, V _{CE} =2V	—	—	200	nA
C	Switching Speed	T _r	V _{CE} =5V I _O =0.1mA	—	20	—	μA
		T _f	R _L =1kΩ	—	30	—	μA

A-EMITTER B-DETECTOR C-COUPLED

REFLECTIVE SWITCH

T-41-73

SPECTRAL RESPONSE



SPECTRAL RESPONSE

