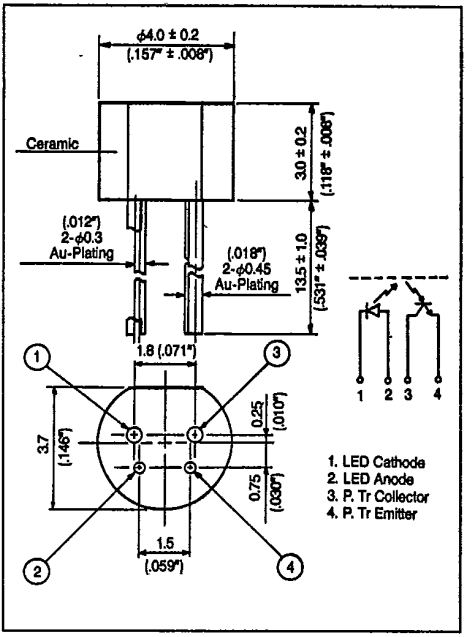
MTRS1060, MTRS1070

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

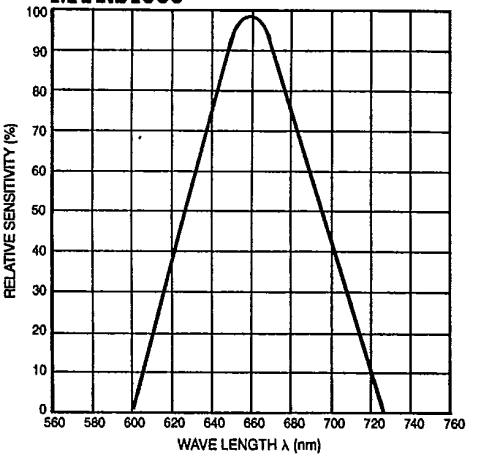
OPTO-ELECTRICAL CHARACTERISTICS (Ta = 25°C)

	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	MTRS1060	λp	I_F=20mA	—	660	—	nm
		MTRS1070				700		
B	Collector Dark Current		I_D (I_{CEO})	V_{CE}=10V	—	—	100	nA
C	Output Current	MTRS1060	I_O	I_F=20mA, V_{CE}=2V, d=1mm	150	300	—	μA
		MTRS1070			250	550		
	Cross Talk		I_X	I_F=20mA, V_{CE}=2V	—	—	200	nA
	Switching Speed		Tr	V_{CE}=5V, I_O=0.1mA, R_L=1kΩ	—	20	—	μA
			Tf			30		

A-EMITTER B-DETECTOR C-COUPLED

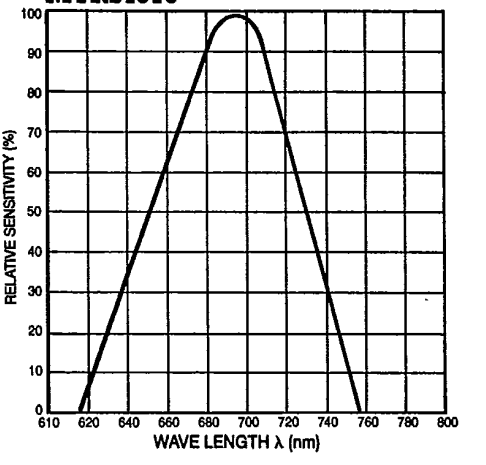
SPECTRAL RESPONSE

MTRS1060



SPECTRAL RESPONSE

MTRS1070



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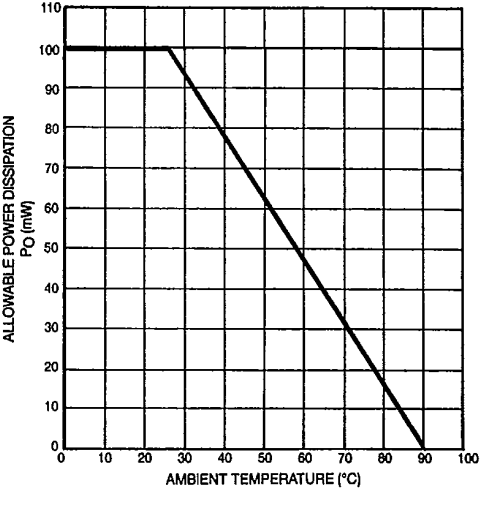

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