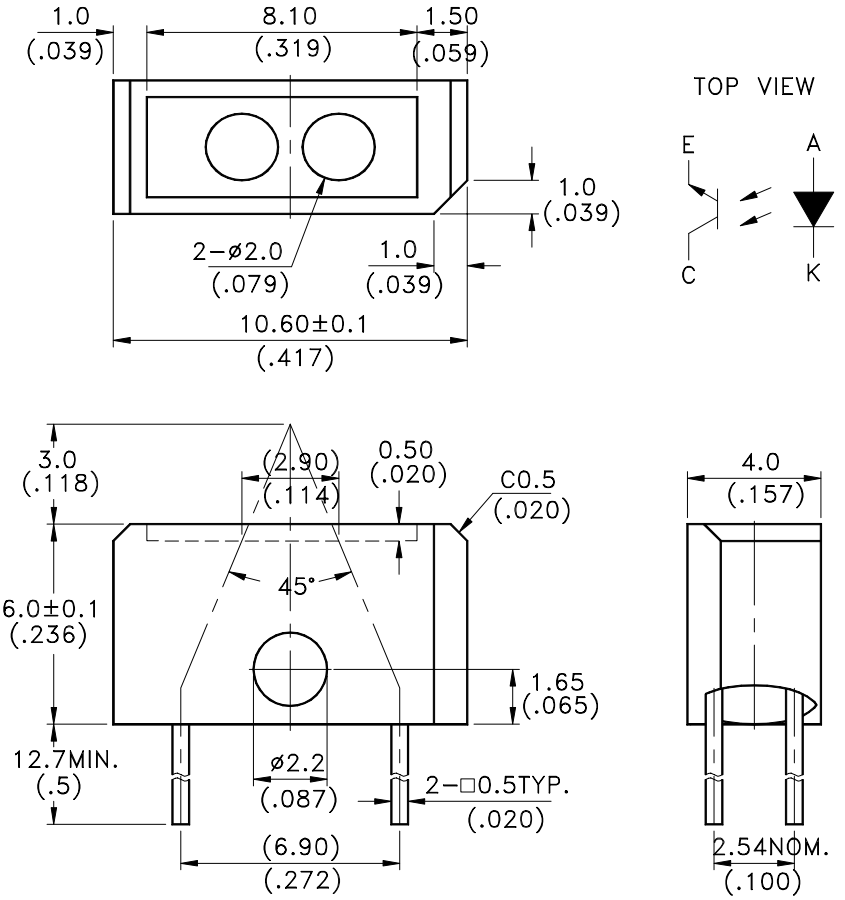
FEATURES

* FOCAL DISTANCE: 3 mm.
* INFRARED RAY CUT-OFF TYPE.

APPLICATION

* PRINTER
* FAX
* OPTOELECTRONIC SWITCHES

PACKAGE DIMENSIONS



NOTES:

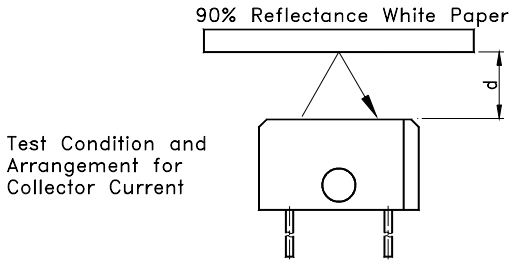
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25mm(.010") unless otherwise noted.

ABSOLUTE MAXIMUM RATINGS AT T_A=25℃

PARAMETER	SYMBOL	MAXIMUM RATING	UNIT
INPUT LED			
Power Dissipation	P_D	75	mW
Peak Forward Current (300 pps , 10 μS pulse)	I_{CP}	1	A
Continuous Forward Current	I_F	60	mA
Reverse Voltage	V_R	5	V
OUTPUT PHOTOTRANSISTOR			
Power Dissipation	P_C	100	mW
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Collector Voltage	V_{ECO}	5	V
Collector Current	I_C	20	mA
Operating Temperature Range	T_{opr}	-25℃ to + 85℃	
Storage Temperature Range	T_{stg}	-40℃ to + 100℃	
Lead Soldering Temperature [1.6mm (.063") Form Case]	T_S	260℃ for 5 Seconds	

ELECTRICAL OPTICAL CHARACTERISTICS AT T_A=25℃

PARAMETER		SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION	
INPUT LED								
Forward Voltage		V_F		1.2	1.6	V	I_F = 20mA	
Reverse Current		I_R			100	μA	V_R=5V	
OUTPUT PHOTOTRANSISTOR								
Collector-Emitter Dark Current		I_{CEO}			100	nA	V_{CE}=10V	
COUPLER								
Collector-Emitter Saturation Voltage		$V_{CE(SAT)}$			0.4	V	I_C=0.05mA I_F=20mA	
On State Collector Current		$I_{C(ON)}$	100		300	μA	V_{CE}=5V I_F=20mA d=3.0mm	BIN A
			260		650			BIN B
			400		1200			BIN C
Response Time	Rise Time	T_R		3	15	μS	V_{CE}=5V, I_C=2mA R_L=100 Ω	
	Fall Time	T_F		4	20			



Test Condition and Arrangement for Collector Current

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25℃ Ambient Temperature Unless Otherwise Noted)

Fig.1 Power Dissipation vs. Ambient Temperature

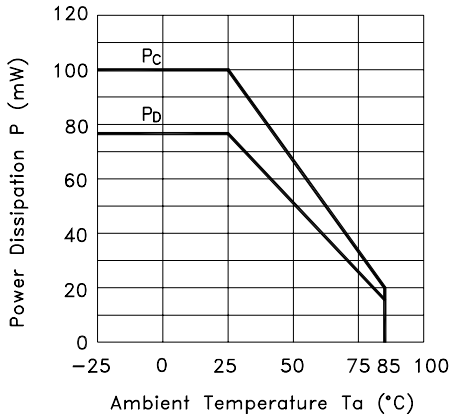


Fig.2 Forward Current vs. Forward Voltage

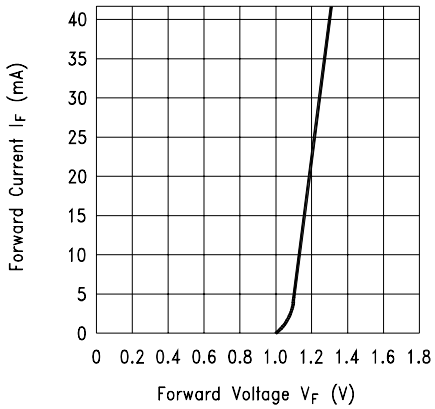


Fig.3 Collector Current vs. Collector-emitter Voltage

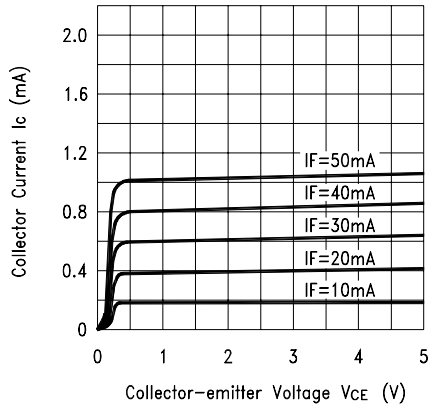
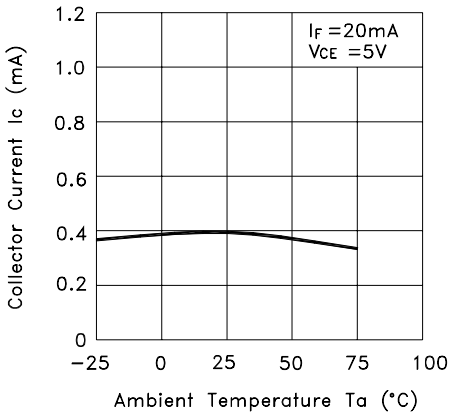


Fig.4 Collector Current vs. Ambient Temperature



TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25℃ Ambient Temperature Unless Otherwise Noted)

Fig.5 Collector-emtter Saturation vs. Voltage Ambient Temperature

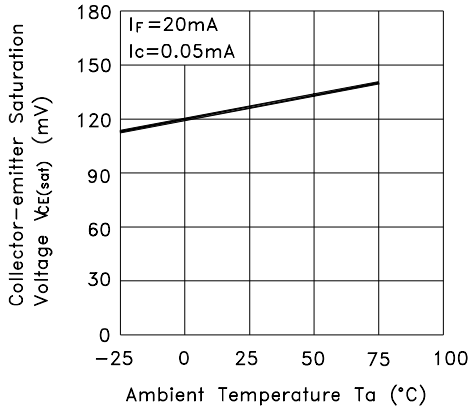


Fig.6 Relative Collector Current vs. Object Distance

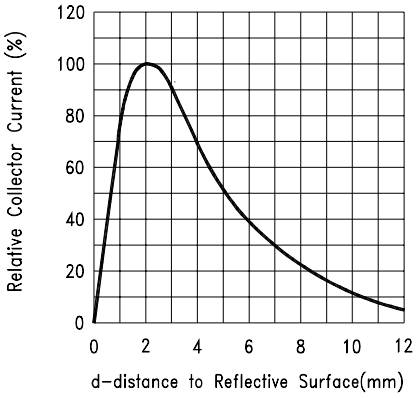
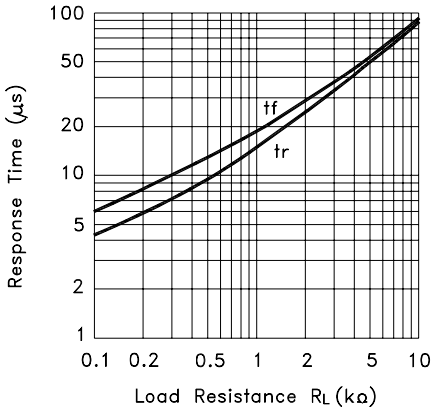
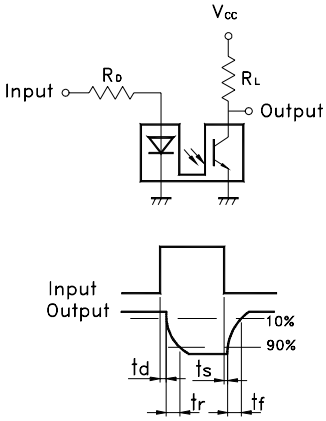


Fig.7 Response Time vs. Load Resistance



Test Circuit for Response Time



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