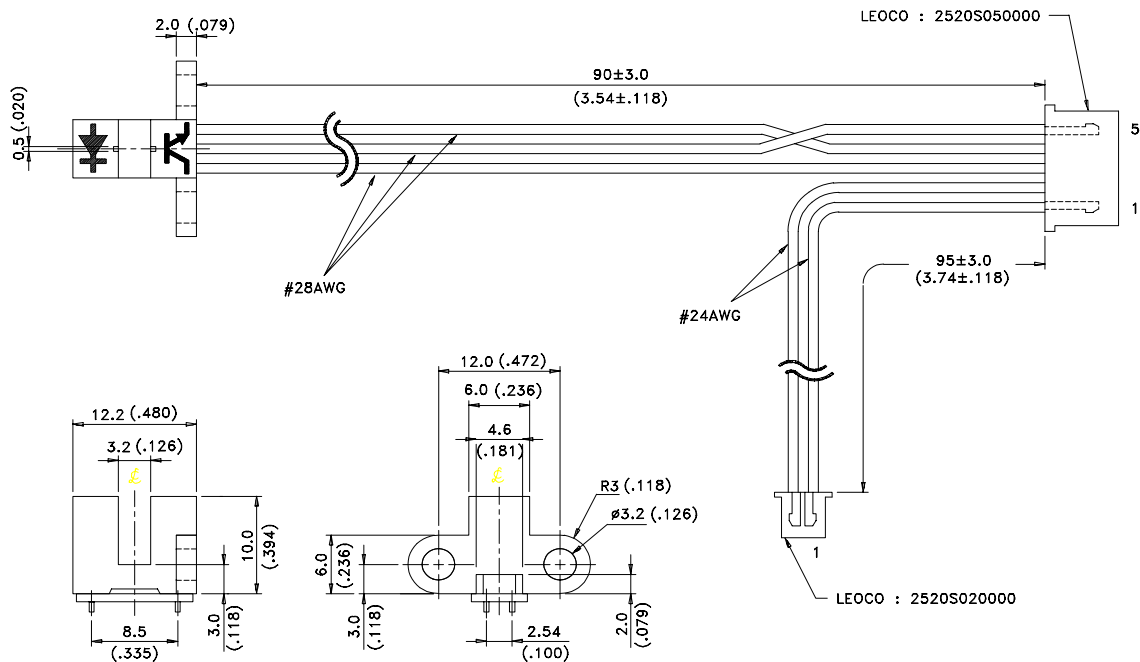


## FEATURES

- \* NON-CONTACT SWITCHING.
- \* FOR DIRECT PC BOARD OR DUAL-IN-LINE SOCKET MOUNTING.
- \* FAST SWITCHING SPEED.

## PACKAGE DIMENSIONS



CONNECTOR PIN NO.	WIRE COLOR	SENSOR PIN NAME
1	YELLOW	
2	GREEN	
3	BLUE	COLLECTOR
4	RED	ANODE
5	BLACK	EMITTER , CATHODE

### NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}(.010")$  unless otherwise noted.

**ABSOLUTE MAXIMUM RATINGS AT TA=25**

PARAMETER	MAXIMUM RATING	UNIT
IR Diode Continuous Forward Current	50	mA
IR Diode Reverse Voltage	5	V
Transistor Collector Current	20	mA
Transistor Power Dissipation	100	mW
IR Diode Peak Power Current (Pulse Wide = 1 $\mu$ S, 300 pps)	3	A
Diode Power Dissipation	100	mW
Phototransistor Collector-Emitter Voltage	30	V
Phototransistor Emitter-Collector Voltage	5	V
Operating Temperature Range	-55 to + 100	
Storage Temperature Range	-55 to + 100	
Lead Soldering Temperature [1.6mm(.063") From Body]	260 for 5 Seconds	

## ELECTRICAL OPTICAL CHARACTERISTICS AT T<sub>A</sub>=25

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
<b>INPUT LED</b>						
Forward Voltage	V <sub>F</sub>		1.2	1.6	V	I <sub>F</sub> = 20mA
Reverse Current	I <sub>R</sub>			100	μ A	V <sub>R</sub> =5V
<b>OUTPUT PHOTOTRANSISTOR</b>						
Collector-Emitter Breakdown Voltage	V(BR) <sub>CEO</sub>	30			V	I <sub>C</sub> =1mA
Emitter-Collector Breakdown Voltage	V(BR) <sub>ECO</sub>	5			V	I <sub>E</sub> =0.1mA
Collector-Emitter Dark Current	I <sub>CEO</sub>			100	nA	V <sub>CE</sub> =10V
<b>COUPLER</b>						
Collector-Emitter Saturation Voltage	V <sub>CE(SAT)</sub>			0.4	V	I <sub>C</sub> =0.2mA I <sub>F</sub> =20mA
On State Collector Current	I <sub>c(ON)</sub>	0.3			mA	V <sub>CE</sub> =5V I <sub>F</sub> =20mA

## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25 Ambient Temperature Unless Otherwise Noted)

Fig.1 Power Dissipation vs. Ambient Temperature

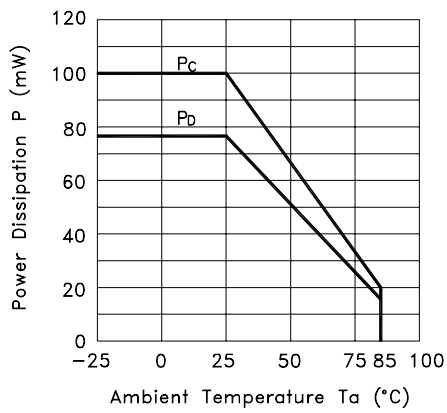


Fig.2 Forward Current vs. Forward Voltage

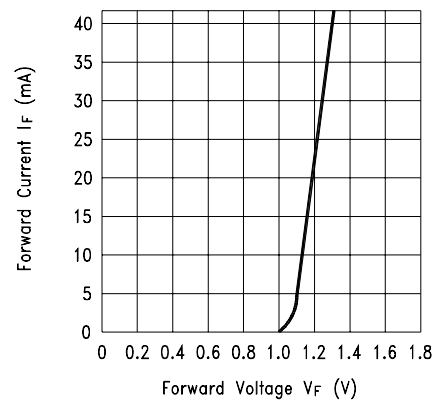


Fig.3 Collector Current vs. Forward Voltage

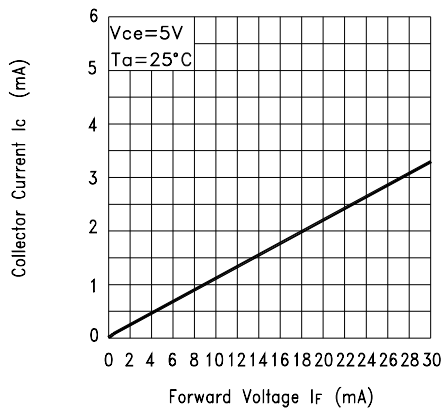
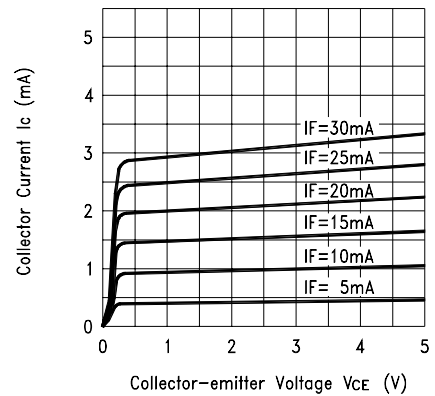


Fig.4 Collector Current vs. Collector-emitter Voltage



## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25 Ambient Temperature Unless Otherwise Noted)

Fig.5 Collector Current vs. Ambient Temperature

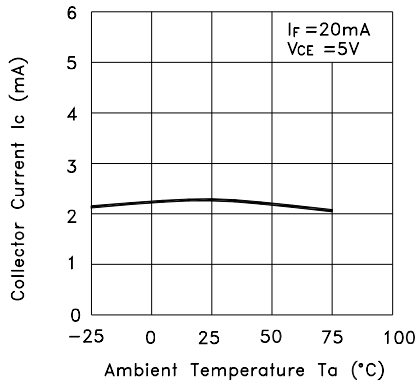


Fig.6 Collector-emitter Saturation Voltage vs. Ambient Temperature

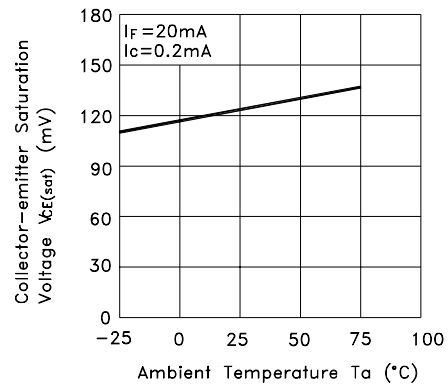
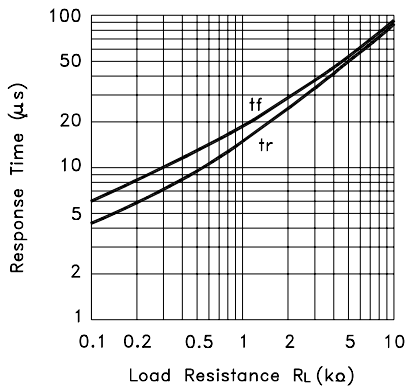


Fig.7 Response Time vs. Load Resistance



Test Circuit for Response Time

