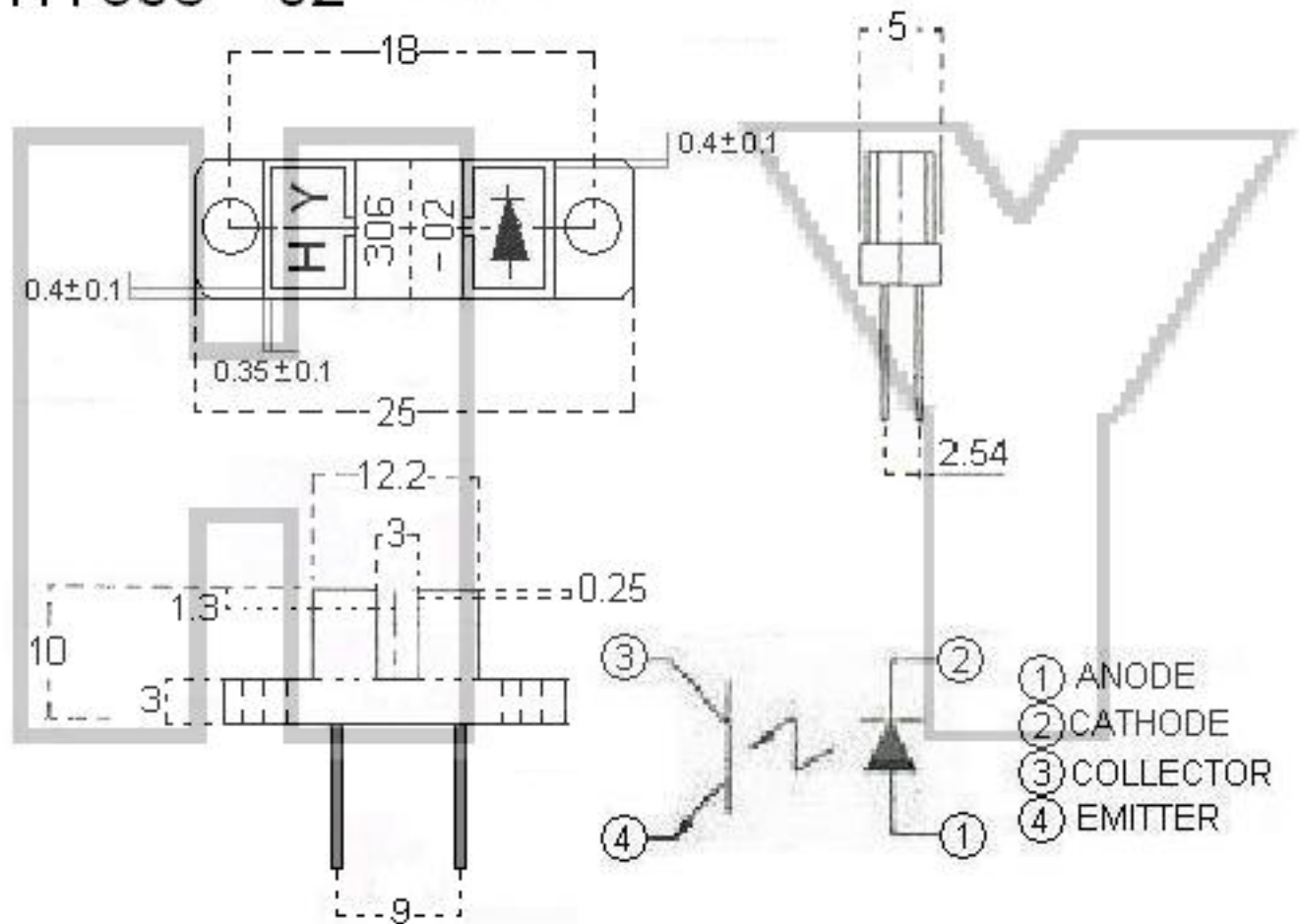


FEATURES

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

PACKAGE DIMENSIONS

HY306—02



NOTES:

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

HY306-02

ABSOLUTE MAXIMUM RATINGS AT TA=25°C

PARAMETER	MAXIMUM RATING	UNIT
IR Diode Continuous Forward Current	60	mA
IR Diode Reverse Voltage	5	V
Transistor Collector Current	20	mA
Transistor Power Dissipation	100	mW
IR Diode Peak Forward Current (Pulse Wide = 10 μ S, 300 pps)	1	A
Diode Power Dissipation	75	mW
Phototransistor Collector-Emitter Voltage	30	V
Phototransistor Emitter-Collector Voltage	5	V
Operating Temperature Range	-25°C to + 85°C	
Storage Temperature Range	-40°C to + 100°C	
Lead Soldering Temperature [1.6mm(.063") From Body , Plastic Housing Exclude]	260°C for 5 Seconds	

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HY306-02

ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C

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 Breakdown Voltage	V _{(BR)CEO}	30			V	I _C = 1mA
Emitter-Collector Breakdown Voltage	V _{(BR)ECO}	5			V	I _E = 100 μA
Collector-Emitter Dark Current	I _{CEO}			100	nA	V _{CE} = 10V
COUPLER						
Collector-Emitter Saturation Voltage	V _{CE(SAT)}			0.4	V	I _C = 2.5mA I _F = 20mA
On State Collector Current	I _{C(ON)}	5.0			mA	V _{CE} = 5V I _F = 20mA
Response Time	Rise Time	t _r	3	15	μS	V _{ce} = 5V, I _c = 2mA
	Fall Time	t _f	4	20		

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HY306-02

Fig.1 Power Dissipation vs. Ambient Temperature

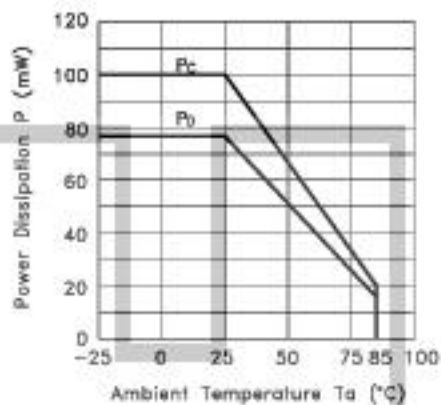


Fig.2 Forward Current vs. Forward Voltage

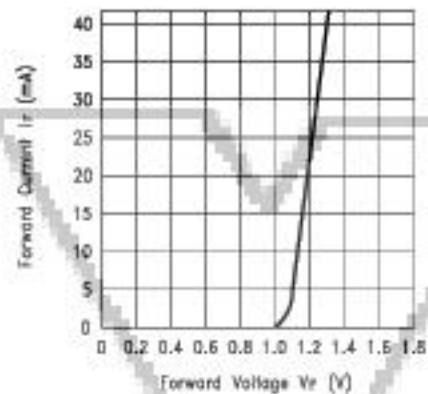


Fig.3 Collector Current vs. Collector-emitter Voltage

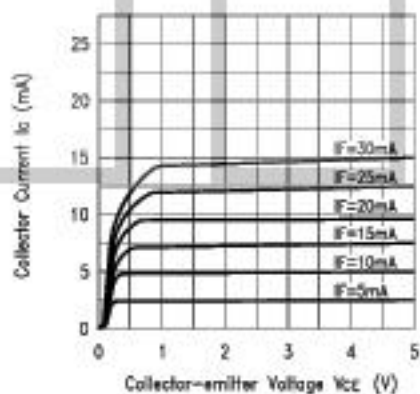
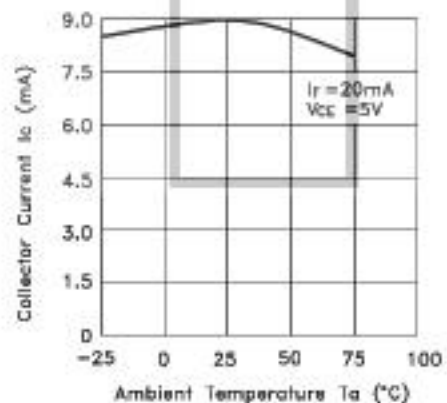


Fig.4 Collector Current vs. Ambient Temperature

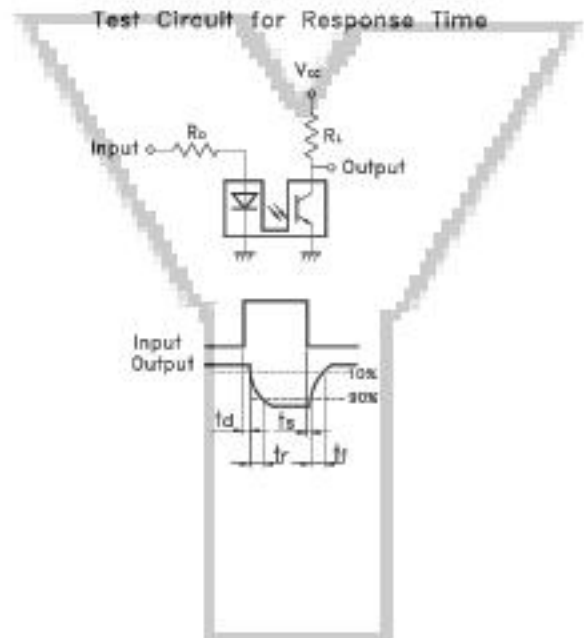
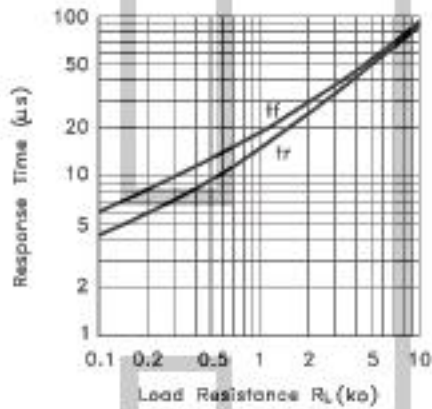


NOTES:

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2. Tolerance is $\pm 0.25mm(.010")$ unless otherwise noted.

HY306-02

Fig.5 Response Time vs. Load Resistance



NOTES:

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