

香港興業電子公司
HONGKONG HINGYIP ELECTRONIC CO.,
興業電子(中國)有限公司 TEL: 0755-83687887
HINGYIP ELECTRONIC (CHINA) CO.,LTD. FAX: 0755-83291852

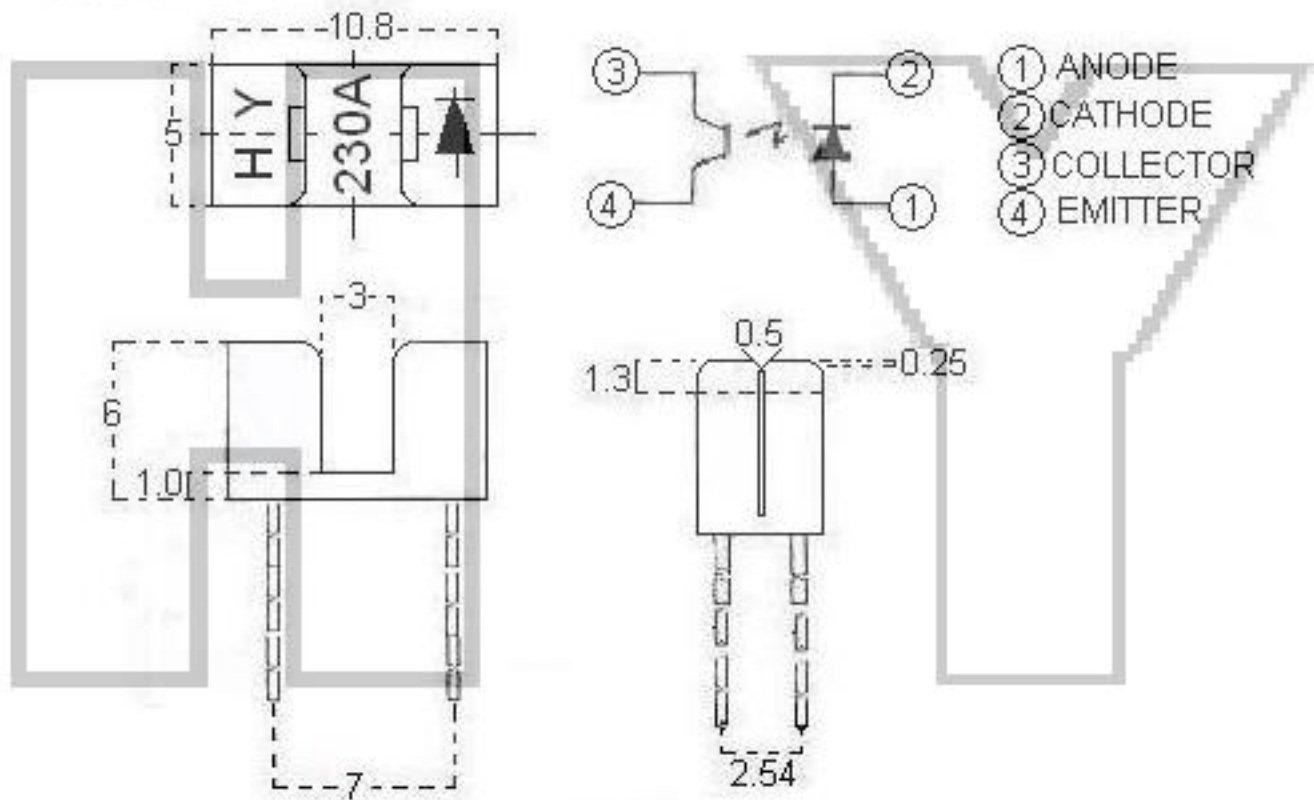
深圳市華強北路華強電子世界二棟 21C126 室 [Http://www.hyzt.com](http://www.hyzt.com) E-mail: hyzt@hyzt.com

FEATURES

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

PACKAGE DIMENSIONS

HY230A



NOTES:

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

香 港 興 業 電 子 公 司

HONGKONG HINGYIP ELECTRONIC CO.,

興 業 電 子 (中 國) 有 限 公 司 TEL: 0755—83687887

HINGYIP ELECTRONIC (CHINA) CO., LTD. FAX: 0755—83291852

深 圳 市 華 強 北 路 華 強 電 子 世 界 二 棟 21C126 室 Http://www.hyzt.com E-mail:hyzt@hyzt.com

HY230A

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	

NOTES:

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

香港興業電子公司

HONGKONG HINGYIP ELECTRONIC CO.,

興業電子(中國)有限公司 TEL: 0755-83687887

HINGYIP ELECTRONIC (CHINA) CO., LTD. FAX: 0755-83291852

深圳市華強北路華強電子世界二棟 21C126室 Http://www.hyzt.com E-mail:hyzt@hyzt.com

HY230A

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		

NOTES:

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

香港興業電子公司

HONGKONG HINGYIP ELECTRONIC CO.,

興業電子(中國)有限公司 TEL: 0755-83687887

HINGYIP ELECTRONIC (CHINA) CO., LTD. FAX: 0755-83291852

深圳市華強北路華強電子世界二棟 21C126室 Http://www.hyzt.com E-mail:hyzt@hyzt.com

HY230A

Fig.1 Power Dissipation vs. Ambient Temperature

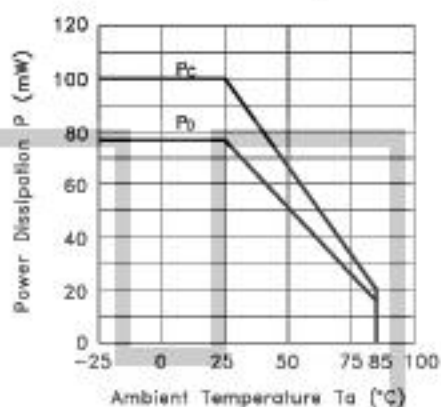


Fig.2 Forward Current vs. Forward Voltage

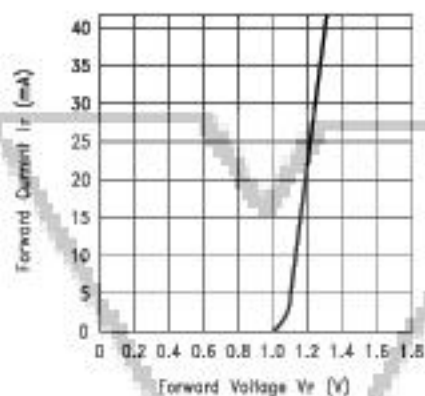


Fig.3 Collector Current vs. Collector-emitter Voltage

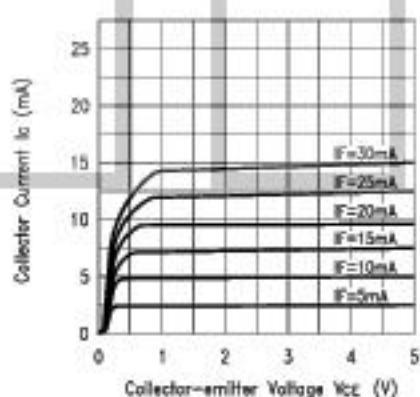
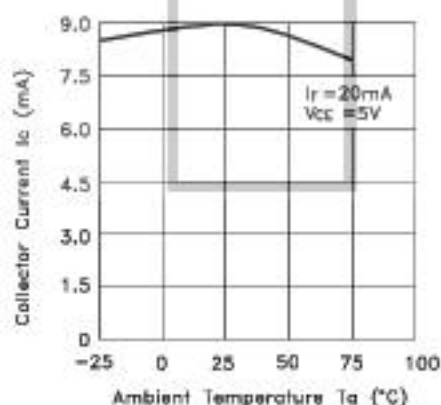


Fig.4 Collector Current vs. Ambient Temperature



NOTES:

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

香港興業電子公司

HONGKONG HINGYIP ELECTRONIC CO.,

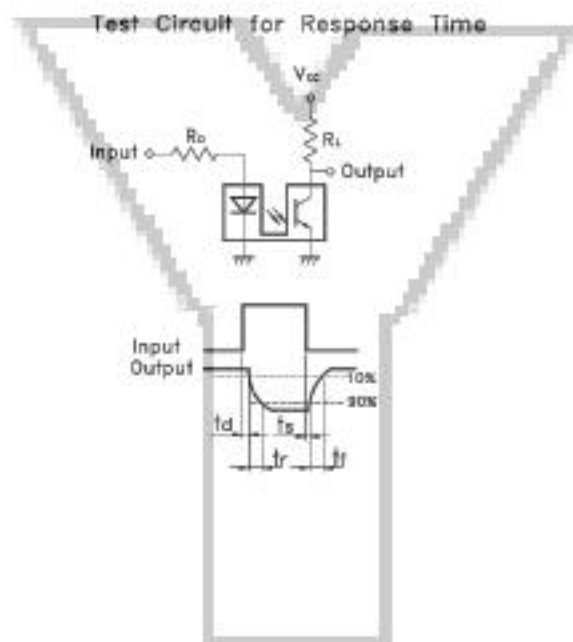
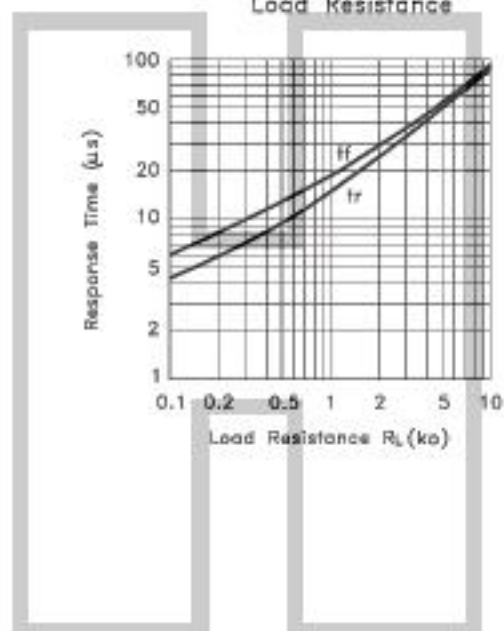
興業電子(中國)有限公司 TEL: 0755-83687887

HINGYIP ELECTRONIC (CHINA) CO., LTD. FAX: 0755-83291852

深圳市華強北路華強電子世界二棟 21C126 室 Http://www.hyzt.com E-mail:hyzt@hyzt.com

HY230A

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.