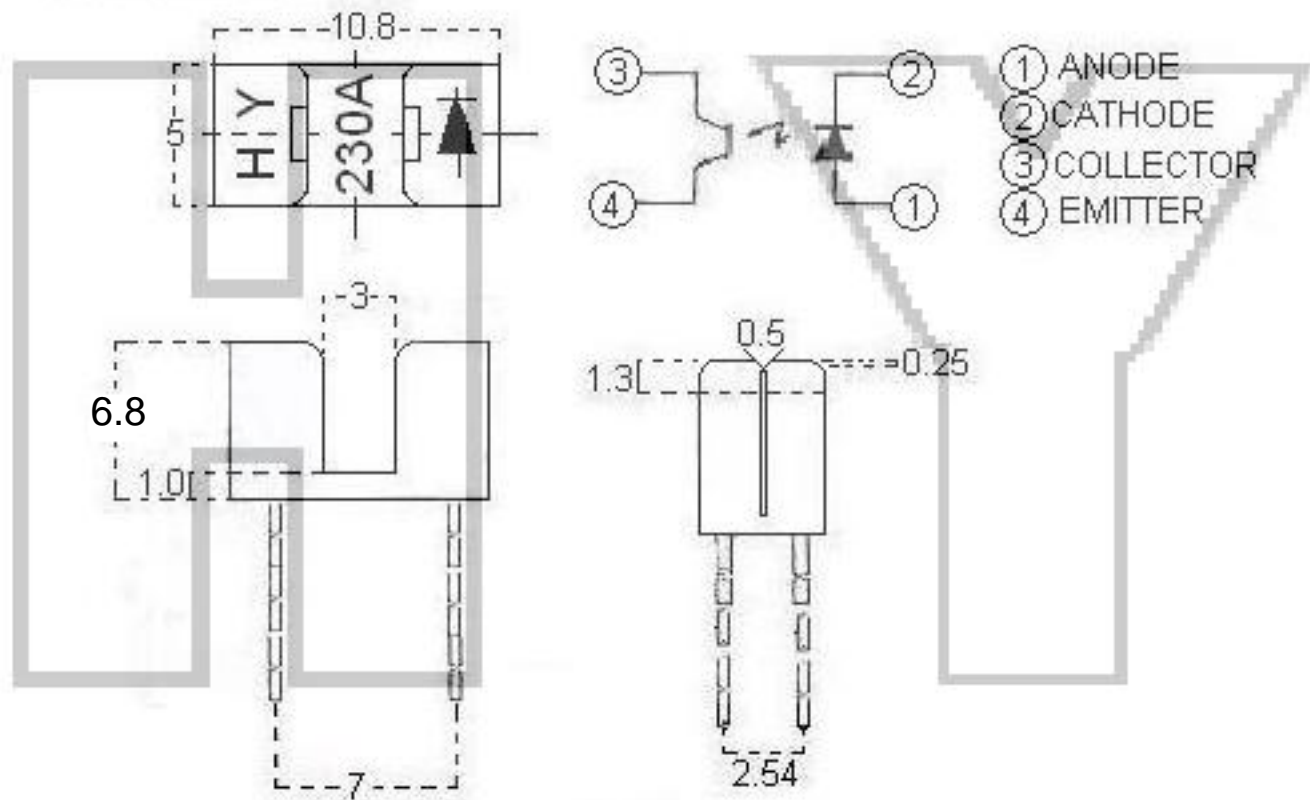


FEATURES

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

PACKAGE DIMENSIONS

HY230AS



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

ABSOLUTE MAXIMUM RATINGS AT TA=25°C

HY230AS

| 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

HY230AS

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 R _L = 100Ω |
| | 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

HY230AS

Fig.1 Power Dissipation vs. Ambient Temperature

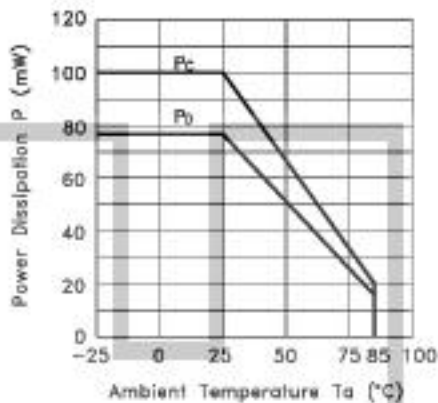


Fig.2 Forward Current vs. Forward Voltage

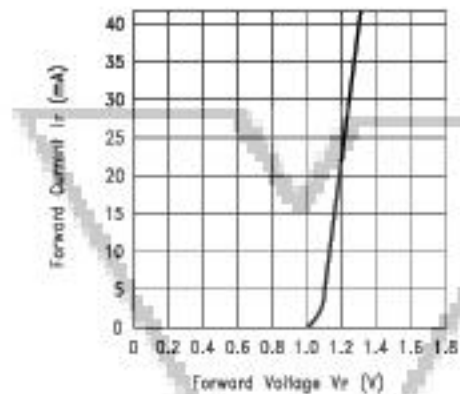


Fig.3 Collector Current vs. Collector-emitter Voltage

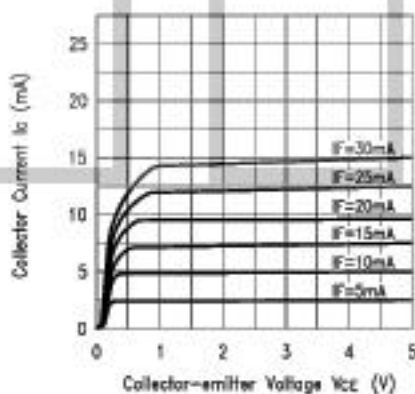
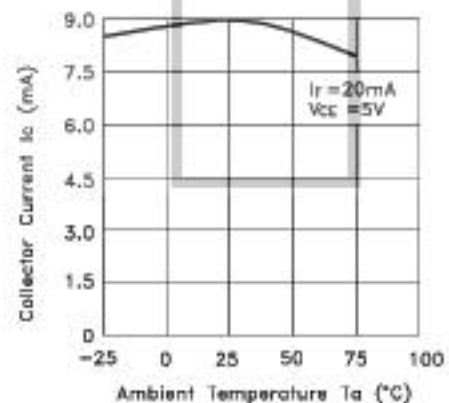


Fig.4 Collector Current vs. Ambient Temperature



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.,

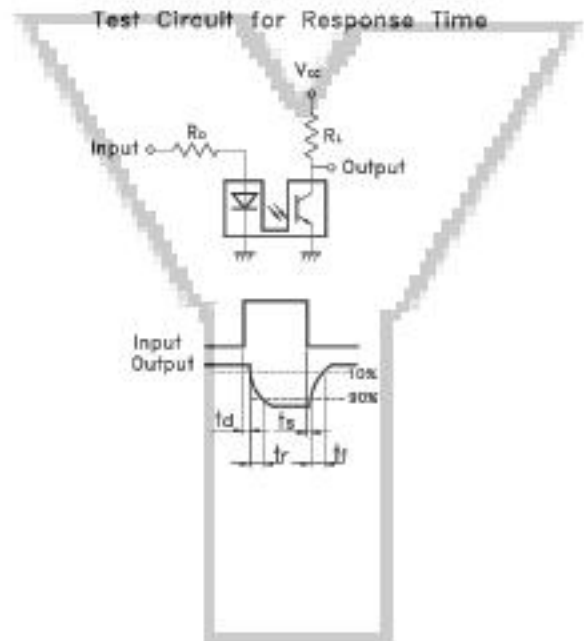
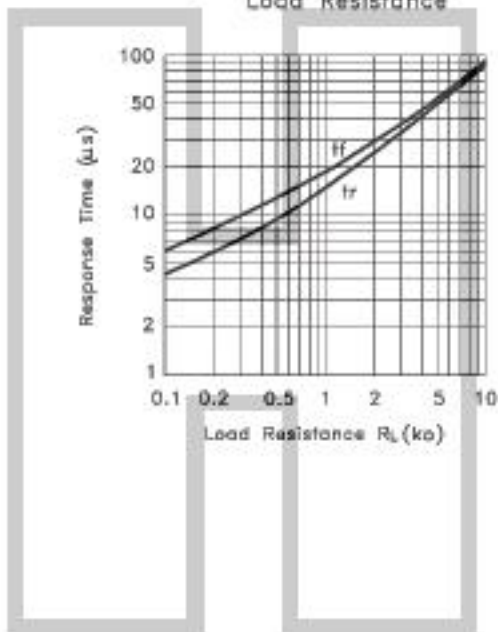
興業電子(中國)有限公司 TEL: 0755-83687887

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

HY230AS

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.