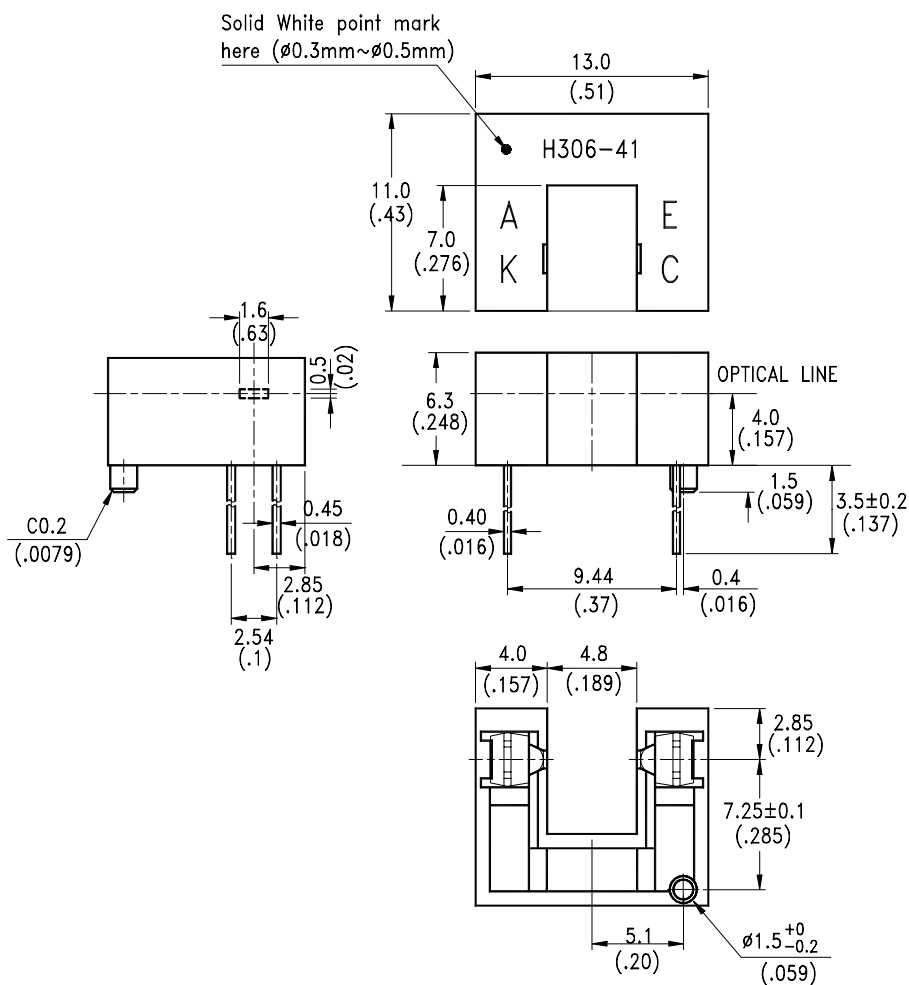


## FEATURES

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

## PACKAGE DIMENSIONS



### NOTES:

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

**ABSOLUTE MAXIMUM RATINGS AT T<sub>A</sub>=25°C**

| PARAMETER                                                                        | MAXIMUM RATING      | UNIT |
|----------------------------------------------------------------------------------|---------------------|------|
| INPUT LED                                                                        |                     |      |
| Power Dissipation                                                                | 75                  | mW   |
| Peak Forward Current ( 300 pps , 10 μ S pulse)                                   | 1                   | A    |
| Continuous Forward Current                                                       | 60                  | mA   |
| Reverse Voltage                                                                  | 5                   | V    |
| OUTPUT PHOTOTRANSISTOR                                                           |                     |      |
| Power Dissipation                                                                | 100                 | mW   |
| Collector-Emitter Voltage                                                        | 30                  | V    |
| Emitter-Collector Voltage                                                        | 5                   | V    |
| Collector Current                                                                | 20                  | mA   |
| Operating Temperature Range                                                      | -25°C to + 85°C     |      |
| Storage Temperature Range                                                        | -55°C to + 100°C    |      |
| Lead Soldering Temperature<br>[1.6mm(.063") From Body , Plastic Housing Exclude] | 260°C for 5 Seconds |      |



# LITE-ON TECHNOLOGY CORPORATION

Property of Lite-On Only

## ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C

| PARAMETER                            |           | SYMBOL               | MIN. | TYP. | MAX. | UNIT | TEST CONDITION                                                    |
|--------------------------------------|-----------|----------------------|------|------|------|------|-------------------------------------------------------------------|
| INPUT LED                            |           |                      |      |      |      |      |                                                                   |
| 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                                                |
| OUTPUT PHOTOTRANSISTOR               |           |                      |      |      |      |      |                                                                   |
| Collector-Emitter Dark Current       |           | I <sub>CEO</sub>     |      |      | 100  | nA   | V <sub>CE</sub> =10V                                              |
| COUPLER                              |           |                      |      |      |      |      |                                                                   |
| Collector-Emitter Saturation Voltage |           | V <sub>CE(SAT)</sub> |      |      | 0.4  | V    | I <sub>C</sub> =0.25mA<br>I <sub>F</sub> =20mA                    |
| On State Collector Current           |           | I <sub>C(ON)</sub>   | 1    |      | 10   | mA   | V <sub>CE</sub> =5V<br>I <sub>F</sub> =20mA                       |
| Response Time                        | Rise Time | T <sub>r</sub>       |      | 3    | 15   | μ S  | V <sub>CE</sub> =5V, I <sub>C</sub> =2mA<br>R <sub>L</sub> =100 Ω |
|                                      | Fall Time | T <sub>f</sub>       |      | 4    | 20   |      |                                                                   |

## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

Fig.1 Power Dissipation vs. Ambient Temperature

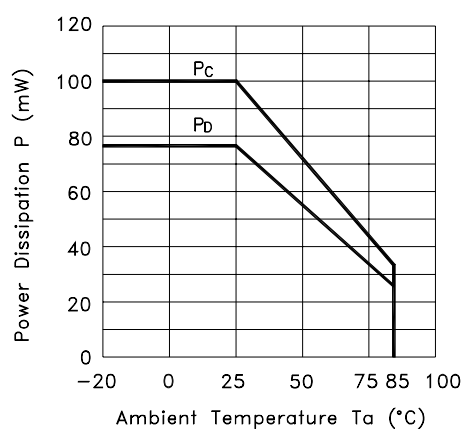


Fig.2 Forward Current vs. Forward Voltage

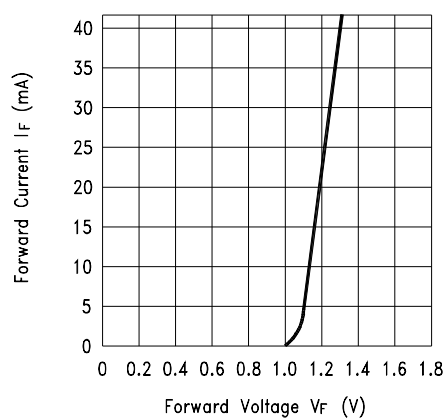


Fig.3 Collector Current vs. Forward Voltage

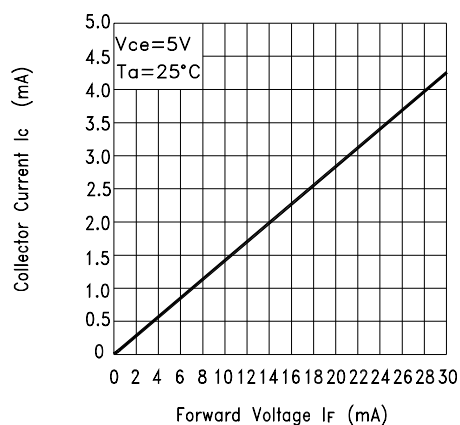
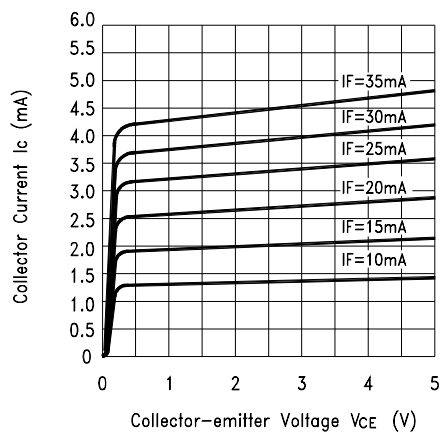


Fig.4 Collector Current vs. Collector-emitter Voltage



## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

Fig.5 Collector Current vs. Ambient Temperature

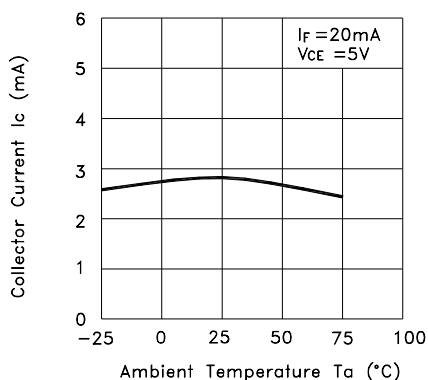


Fig.6 Collector-emitter Saturation Voltage vs. Ambient Temperature

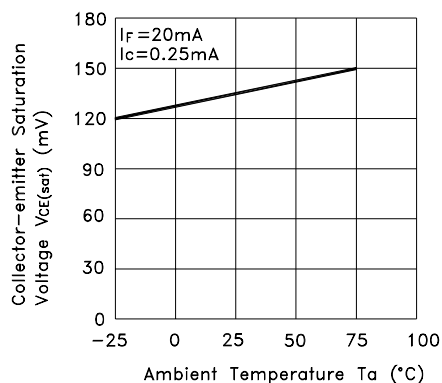
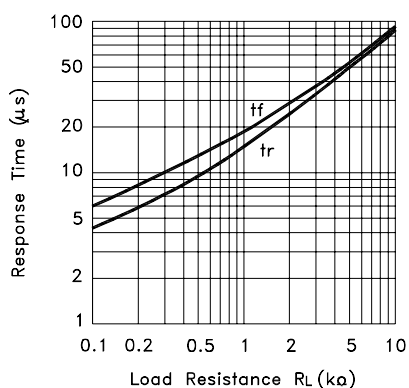


Fig.7 Response Time vs. Load Resistance



Test Circuit for Response Time

