

Features

- Mechanical switch replacement.
- For direct PC board or dual-in line socket mounting.
- Customized lever arm can be designed for specific application.
- Guaranteed actuator life 10^6 times .

Application

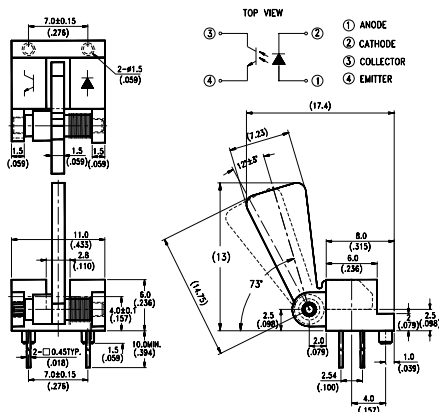
- FAX machine
- Copy machine
- Printer

Description

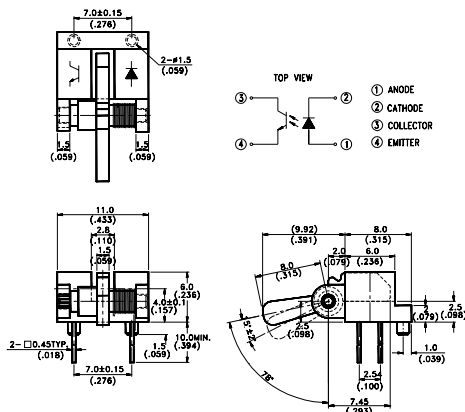
The LTH-306-08/LTH-306-09 consist of Gallium Arsenide infrared emitting diode and a NPN silicon phototransistor mounted in a black plastic housing. Phototransistor switching takes place whenever the level arm unblock the slot. They are designed for direct soldering into PC board or mounting in standard dual-in-line socket.

Package Dimensions

LTH-306-08



LTH-306-09



Notes:

- 1.All dimensions are in millimeters (inches).
- 2.Tolerance is ± 0.25 mm (.010").
- 3.Lead spacing is measured where the leads emerge from the package.
- 4.Specifications are subject to change without notice.

Absolute Maximum ratings at Ta=25°C

| Parameter | | Symbol | Maximum Rating | Unit |
|--|--|------------------|---------------------|------|
| Input LED | Continuous Forward Current | I _F | 60 | mA |
| | Reverse Voltage | V _R | 5 | V |
| | Peak Forward Current (Pulse Wide=10 μ S,300PPS) | I _{CP} | 1 | A |
| | Power Dissipation | P _D | 75 | mW |
| Output phototransistor | Collector Current | I _C | 20 | mA |
| | Power Dissipation | P _C | 100 | mW |
| | Collector-emitter Voltage | V _{CEO} | 30 | V |
| | Emitter-collector Voltage | V _{ECO} | 5 | V |
| Operating Temperature Range | | T _{opr} | -25°C to + 85°C | |
| Storage Temperature Range | | T _{stg} | -40°C to + 100°C | |
| Lead Soldering Temperature [1.6mm(.063 in.)from body] | | T _s | 260°C for 5 Seconds | |

Electrical Optical Characteristics at Ta=25°C

| Parameter | Symbol | Part No. | 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 | μ A | V _R =5V |
| Output phototransistor | | | | | | | |
| Collector Dark Current | I _{CEO} | | | | 100 | nA | V _{CE} =10V |
| Coupler | | | | | | | |
| Collector-Emitter Saturation Voltage | V _{CE(sat)} | | | | 0.4 | V | I _C =0.25mA, I _F =20mA |
| On State Collector Current | I _{C(ON)} | | 0.5 | | | mA | V _{CE} =5V, I _F =20mA |

Typical Electrical/Optical Characteristic Curves
(25°C Ambient Temperature Unless Otherwise Noted)

Fig.1 Power Dissipation vs.
Ambient Temperature

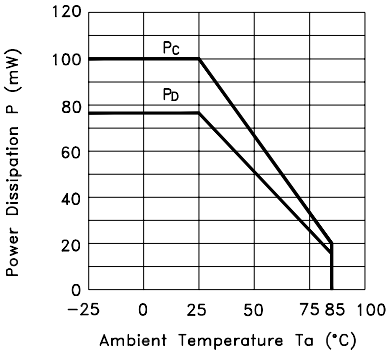


Fig.2 Forward Current I_F vs.
Forward Voltage V_F

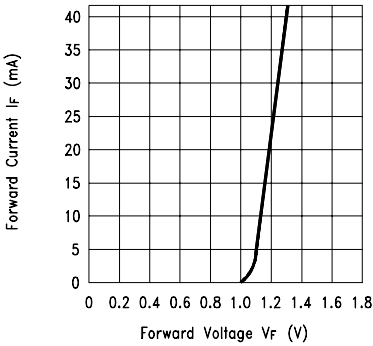


Fig.3 Collector Current I_C vs.
Collector-emitter Voltage

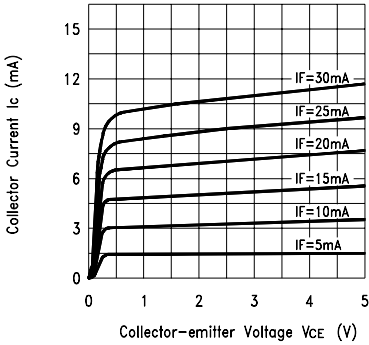


Fig.4 Collector Current I_C vs.
Ambient Temperature

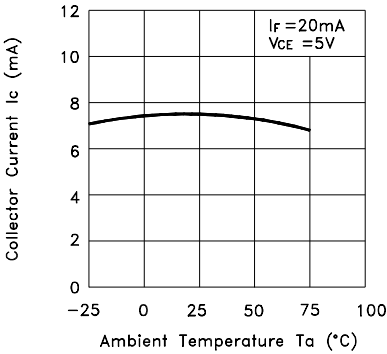


Fig.5 Collector-emitter Saturation
Voltage vs. Ambient Temperature

