

Features

- Compact, moisture resistant package
- Low LED current
- Passive resistance output

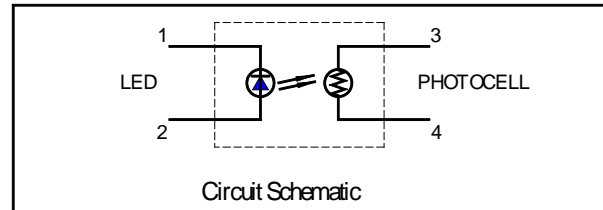
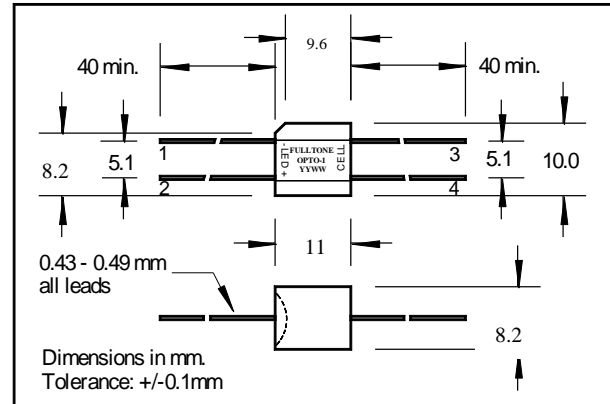
Description

This NSL-37-004 optocoupler consists of an LED input optically coupled to a photocell. The photocell resistance is high when the LED current is "off" and low when the LED current is "on".

Absolute Maximum Ratings

| | |
|---------------------------|--------------|
| Storage Temperature | -40 to +75°C |
| Operating Temperature | -40 to +75°C |
| Soldering Temperature (2) | 260°C |
| Isolation Voltage (peak) | 2500V |

- Note:
- (1) Derate linearly to 0 at 75°C
 - (2) >2 mm from case for <5 sec.
 - (3) Print "FULLTONE OPTO-1" and date code YYWW.
 - (4) Approved LED APC16792 to be used only.



Electrical Characteristics (T_A=25°C unless otherwise noted)

| Symbol | Parameter | Min | Typ | Max | Units | Test Conditions |
|------------------|----------------------|-----|-----|-----|-------|--|
| LED | | | | | | |
| I _F | Forward Current | | | 40 | mA | |
| V _F | Forward Voltage | | | 2.5 | V | I _F = 20 mA |
| V _R | Reverse Voltage | | | 3.0 | V | |
| Cell | | | | | | |
| V _C | Maximum Cell Voltage | | | 100 | V | (Peak AC or DC) |
| P _D | Power Dissipation | | | 175 | mW | (1) |
| Coupled | | | | | | |
| R _{ON} | On Resistance | | | 125 | Ω | I _F = 40 mA, 100% test per lot. |
| | | | | 250 | Ω | I _F = 10 mA, sample test per lot, data on file. |
| | | 0.5 | 1.5 | 3.5 | KΩ | I _F = 1 mA, sample test per lot, data on file. |
| | | | 50 | | KΩ | I _F = 0.1 mA, sample test per lot, data on file. |
| R _{OFF} | Off Resistance | 500 | | | MΩ | 10 sec after I _F = 0 mA, 100% test per lot. |
| T _R | Rise Time | | | 100 | μsec | (V _{CC} = 9V, R _L = 1 M ohm), Time to reach 63% of its saturation value after the photocell is illuminated. |
| T _F | Decay Time | | | 35 | msec | (V _{CC} = 9V, R _L = 1 M ohm), Time to decay to 37% of its saturation value (~100K ohm) after the light is removed. |

Specifications subject to change without notice.

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