

Optocoupler

Features

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

Description

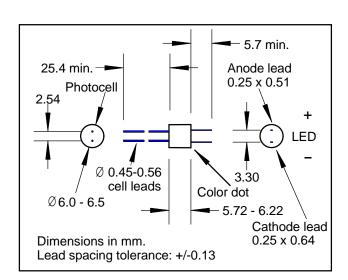
This optocoupler consists of an LED input optically coupled to a photocell. The photocell resistance is high when the LED current is "off" and low resistance when the LED current is "on".

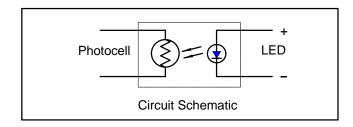
Absolute Maximum Ratings

Storage Temperature -40 to +75°C Operating Temperature -40 to +75°C Soldering Temperature (1) 260°C Isolation Voltage (peak) 2000V

(1) >2 mm from case for <5 sec. Note:

- (2) Derate linearly to 0 at 75°C
- (3) The Rise Time, T_R, is the time required for the dark to light change in conductance to reach 63% of its final value.





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

| Symbol | Parameter | Min. | Тур. | Max. | Units | Test Conditions |
|------------------|-----------------------|------|------|------|-------|--|
| LED | | | | | , | |
| I _F | Forward Current | | | 40 | mA | (2) |
| V_{F} | Forward Voltage | | | 2.0 | V | $I_F = 16 \text{ mA}$ |
| I_R | Reverse Current | | | 100 | μΑ | $V_R = 4V$ |
| Cell | | | | | | |
| V_{C} | Maximum Cell Voltage | | | 60 | V | (Peak AC or DC) |
| P_D | Power Dissipation | | | 50 | mW | (2) |
| Coupled | | | | | | |
| R _{ON} | On Resistance | | | 500 | Ω | $I_F = 20 \text{ mA}$ |
| R _{OFF} | Off Resistance | 500 | | | KΩ | 10 sec after $I_F = 0$, 5Vdc on cell. |
| T_R | Rise Time | | 3.5 | | msec | Time to 63% of final conductance @ I _F = 16mA (3) |
| T_F | Decay Time | | | 500 | msec | Time to $100K\Omega$ after removal of $I_F = 16mA$ |
| | Cell Temp Coefficient | | 1.0 | | %/°C | $I_F > 5 \text{ mA}$ |

Specifications subject to change without notice

103708 REV 1