

### Features

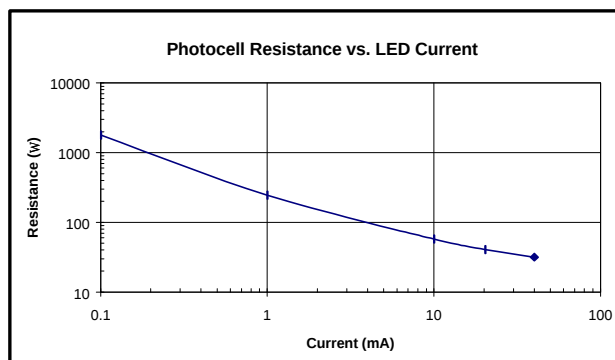
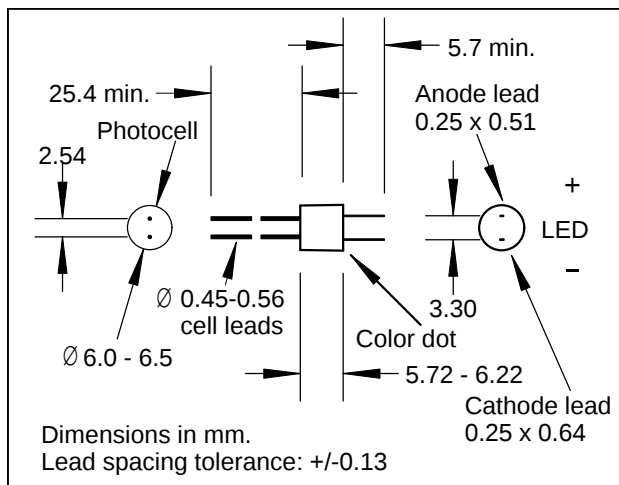
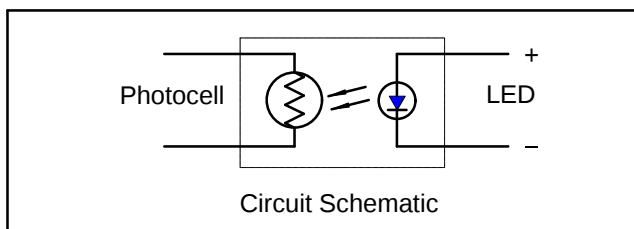
- Compact, moisture resistant package
- Lowest "on" resistance
- Very low LED current
- Passive resistance output
- Low distortion

### 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        |



### Electrical Characteristics (T<sub>A</sub>=25°C)

| Symbol           | Parameter             | Min. | Typ. | Max. | Units | Test Conditions                                          |
|------------------|-----------------------|------|------|------|-------|----------------------------------------------------------|
| <b>LED</b>       |                       |      |      |      |       |                                                          |
| I <sub>F</sub>   | Forward Current       |      |      | 25   | mA    |                                                          |
| V <sub>F</sub>   | Forward Voltage       |      |      | 2.5  | V     | I <sub>F</sub> = 20 mA                                   |
| I <sub>R</sub>   | Reverse Current       |      |      | 10   | μA    | V <sub>R</sub> = 4V                                      |
| <b>Cell</b>      |                       |      |      |      |       |                                                          |
| V <sub>C</sub>   | Maximum Cell Voltage  |      |      | 60   | V     | (Peak AC or DC)                                          |
| P <sub>D</sub>   | Power Dissipation     |      |      | 50   | mW    | (2)                                                      |
| <b>Coupled</b>   |                       |      |      |      |       |                                                          |
| R <sub>ON</sub>  | On Resistance         |      |      | 40   | Ω     | I <sub>F</sub> = 20 mA                                   |
|                  |                       |      | 140  |      | Ω     | I <sub>F</sub> = 1 mA                                    |
| R <sub>OFF</sub> | Off Resistance        | 1    | 5    |      | MΩ    | 10 sec after I <sub>F</sub> = 0, 5Vdc on cell.           |
| T <sub>R</sub>   | Rise Time             |      | 5    |      | msec  | Time to 63% of final conductance @ I <sub>F</sub> = 20mA |
| T <sub>F</sub>   | Decay Time            |      | 80   |      | msec  | Time to 100KΩ after removal of I <sub>F</sub> = 20mA     |
|                  | Cell Temp Coefficient |      | 0.7  |      | %/°C  | I <sub>F</sub> > 5 mA                                    |

Specifications subject to change without notice  
Note: (1) >2 mm from case for <5 sec.  
(2) Derate linearly to 0 at 75°C

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