

# OPTO-100-05

## 10kV High Voltage Opto-Coupler

### Features

- **Easy to Use**
- **No External Components Required**
- **Internal Current Limiting Resistors**
- **Small Footprint**
- **10kV Reverse Voltage Rating**
- **Fast Response**
- **Miniature PC Board Mountable Package**
- **Wide Operating Temp Range (-40°C to +85°C)**

RoHS

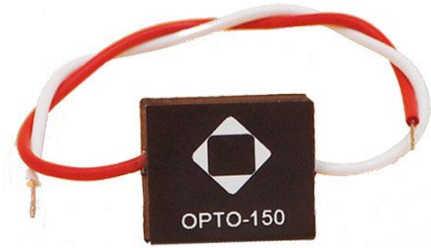


### Mechanical Characteristics

- **Packaging:** Encapsulated in high performance epoxy

### Environmental Characteristics

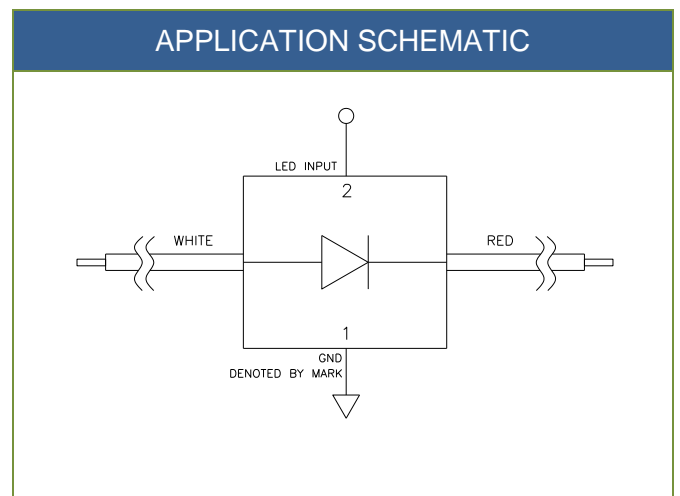
- **Operating Temp Range:** -40°C to +85°C
- **Storage Temp Range:** -55°C to +85°C



### Description

The **OPTO-100-05** is a miniature; 10kV rated high voltage opto-coupler which integrates low voltage LED drivers with high voltage photo detector diodes. Designed for ease of use, the **OPTO-100-05** delivers circuit isolation in a space-saving (0.40”L x 0.24”W x 0.25”H) encapsulated package.

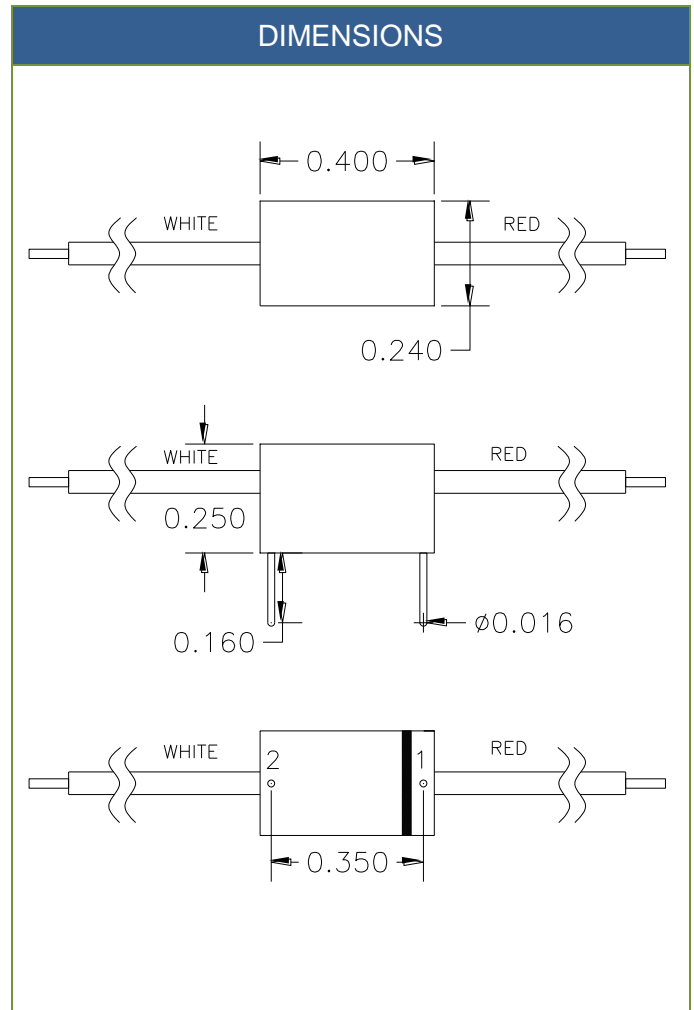
Typical applications for the **OPTO-100-05** include high voltage switching, high voltage isolation, external voltage sensing, voltage level shifting, and mass spectrometry.





ELECTRICAL CHARACTERISTICS	
<b>Absolute Max</b>	
LED Forward Current	400 mA
LED Reverse Voltage	5 V
LED Max Input Voltage	5 V
LED Forward Voltage Drop	2.9 V
Photodiode Reverse Voltage	10,000 V
Photodiode Dissipation	1.25 W
<b>Typical</b>	
LED Voltage Input @100mA Current Drive	3.25 V
Reverse Leakage Current @15,000 V, I <sub>LED</sub> = 0mA	<10 nA
DC Current Transfer Ratio	0.15%
Turn-on Time	2 μs
Turn-off Time	2 μs

All specifications at 25°C ambient temperature unless otherwise stated.



Pin Labels	
Pin 1	LED -
Pin 2	LED +

