



# Optocoupler

# Features

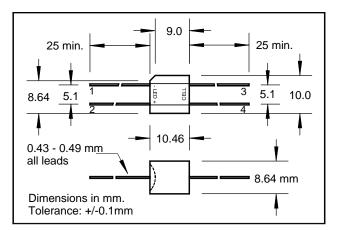
- Compact, moisture resistant package
- Low LED current
- Passive resistance output

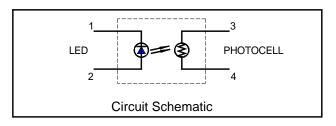
#### Description

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 (2)	260°C
Isolation Voltage (peak)	2500V





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

Symbol	Parameter	Min	Тур	Max	Units	Test Conditions	
LED							
I <sub>F</sub>	Forward Current			40	mA		
V <sub>F</sub>	Forward Voltage			2.5	V	I <sub>F</sub> = 20 mA	
V <sub>R</sub>	Reverse Voltage			3.0	V		
Cell							
V <sub>C</sub>	Maximum Cell Voltage			100	V	(Peak AC or DC)	
PD	Power Dissipation			175	mW	(1)	
Coupled							
			75		KΩ	I <sub>F</sub> = 1.0 mA	
R <sub>ON</sub>	On Resistance (3)		10		KΩ	I <sub>F</sub> = 10 mA	
			2.0	3.5	KΩ	$I_F = 40 \text{ mA}$	
R <sub>OFF</sub>	Off Resistance	100			MΩ	10 sec after $I_F = 0$ .	
T <sub>R</sub>	Rise Time		3.5		msec	Time to 63% of final conductance @ I <sub>F</sub> =1mA (4)	
Τ <sub>F</sub>	Decay Time			50	msec	Time to $1M\Omega$	

Specifications subject to change without notice.

Note: (1) Derate linearly to 0 at 75°C

- (2) > 2 mm from case for < 5 sec.
- (3) Measured after 24 hours at 20 mA.
- (4) The Rise Time, T<sub>R</sub>, is the time required for the dark to light change in conductance to reach 63% of its final value

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