

## **Optocoupler**

## **Features**

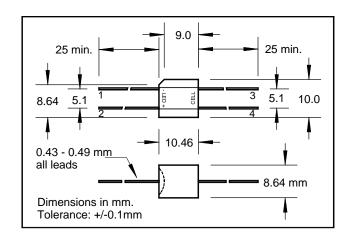
- Compact, moisture resistant package
- Low LED current
- Passive resistance output

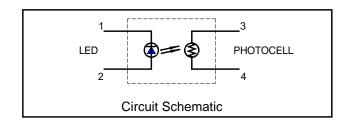
## **Description**

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	mΑ	
$V_{F}$	Forward Voltage			2.5	<b>V</b>	$I_F = 20 \text{ mA}$
$V_R$	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						
			5.5		KΩ	$I_F = 1 \text{ mA}$
R <sub>ON</sub>	On Resistance		800		Ω	$I_F = 10 \text{ mA}$
			200	500	Ω	$I_F = 40 \text{ mA}$
R <sub>OFF</sub>	Off Resistance	1			МΩ	10 sec after $I_F = 0$ .
$T_R$	Rise Time		3.5		msec	Time to 63% of final conductance @ I <sub>F</sub> =10mA (3)
$T_F$	Decay Time			500	msec	Time to $100K\Omega$ after removal of $I_F = 10 \text{ mA}$

Specifications subject to change without notice.

102513 REV 3

Note:

- (1) Derate linearly to 0 at 75°C
- (2) >2 mm from case for <5 sec.
- (3) 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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