

Features

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

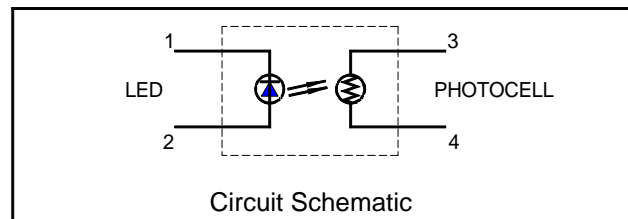
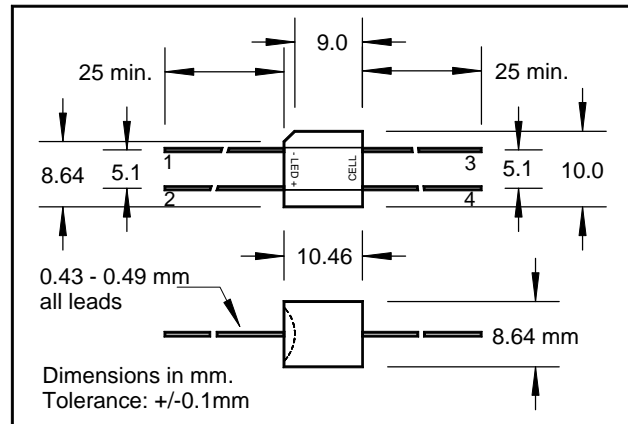
Description

This NSL-37V83 optocoupler consists of an LED input optically coupled to a photocell. The photocell resistance is high when the LED current is "off" and low 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

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



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

Symbol	Parameter	Min	Typ	Max	Units	Test Conditions
LED						
I _F	Forward Current			40	mA	
V _F	Forward Voltage			2.5	V	I _F = 20 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						
R _{ON}	On Resistance		20		KΩ	I _F = 1.0 mA
			600		Ω	I _F = 10 mA
			200	500	Ω	I _F = 40 mA
R _{OFF}	Off Resistance	50			MΩ	10 sec after I _F = 0.
T _R	Rise Time		2.5		msec	Time to 63% of final R _{ON} @ I _F =40mA
T _F	Decay Time			35	msec	Time to 100KΩ from removal of I _F =40mA

Specifications subject to change without notice

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