NSL-39S52

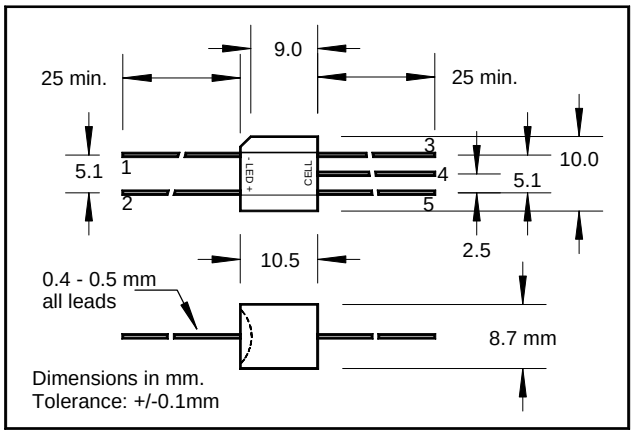
Optocoupler, Dual

Features

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

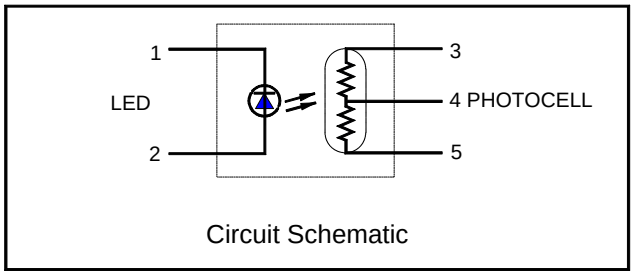
Description

This optoisolator 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

Operating & Storage Temp	-40 to +85°C
Soldering Temperature (1)	260°C
Isolation Voltage (peak)	2500V



Circuit Schematic

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	(2)
Coupled						
R_{ON}	On Resistance	1.7		3.4	KΩ	I_F = 10 mA
R_{OFF}	Off Resistance	500			KΩ	5 sec after I_F = 0.
T_R	Rise Time		3.0		msec	Time to 63% of final conductance @ I_F=16mA (3)
T_F	Decay Time			50	msec	Time to 100KΩ after removal of I_F = 40 mA
R_M	On Resistance Matching			±25	%	I_F = 16 mA

Specifications subject to change without notice.

102965 REV 4

Note: (1) >2 mm from case for <5 sec.
(2) Derate linearly to 0 at 75°C.
(3) The Rise Time, T_R, is the time required for the dark to light change in conductance to reach 63% of its final value.

2 Cogan Ave, Plattsburgh
NY, 12901, USA
Tel: 518-561-3160
Fax: 514-747-3906

Northwich, Cheshire
CW9 7TN, United Kingdom
Tel: 01606-41999
Fax: 01606-49706

2150 Ward, Montreal
Que, H4M 1T7, Canada
Tel: 514-744-5507
Fax: 514-747-3906