

### Features

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

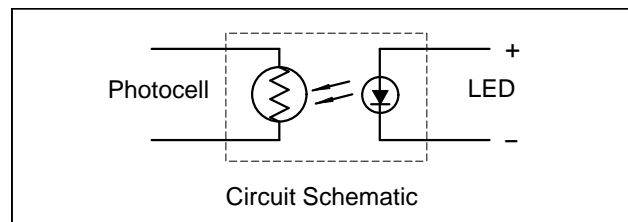
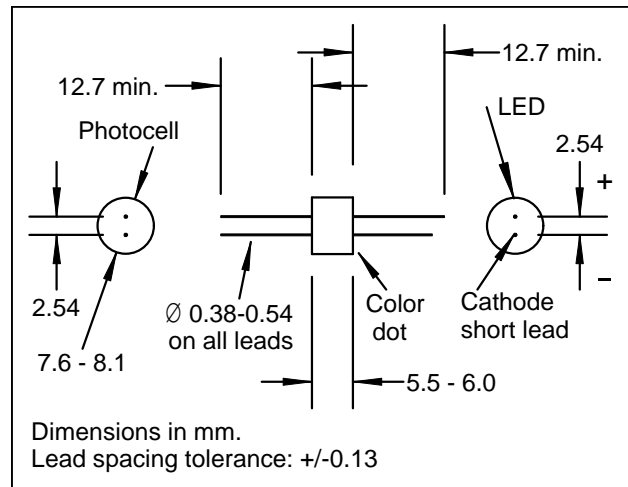
### Description

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 (1)	260°C
Isolation Voltage (peak)	2000V

- 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.



### Electrical Characteristics ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Min	Typ	Max	Units	Test Conditions
<b>LED</b>						
$I_F$	Forward Current			40	mA	(2)
$V_F$	Forward Voltage			2.5	V	$I_F = 16 \text{ mA}$
$I_R$	Reverse Current			3.0	$\mu\text{A}$	$V_R = 4\text{V}$
<b>Cell</b>						
$V_C$	Maximum Cell Voltage			100	V	(Peak AC or DC)
$P_D$	Power Dissipation			50	mW	(2)
<b>Coupled</b>						
$R_{ON}$	On Resistance:	NSL-28		400	$\Omega$	$I_F = 20 \text{ mA}$
		NSL-28AA		2.5	$\text{K}\Omega$	
		NSL-28AA	5		$\text{K}\Omega$	
$R_{OFF}$	Off Resistance:	NSL-28	10		$\text{M}\Omega$	10 sec after $I_F = 0$ , 5Vdc on cell.
		NSL-28AA	1		$\text{M}\Omega$	
$T_R$	Rise Time:	NSL-28		5	msec	Time to 63% of final conductance @ $I_F = 16\text{mA}$ (3)
		NSL-28AA		0.5	msec	
$T_F$	Decay Time	NSL-28		80	msec	Time to 100 $\text{K}\Omega$ after removal of $I_F = 16\text{mA}$
		NSL-28AA		60	msec	
	Cell Temp Coefficient:	NSL-28		0.7	$\%/^\circ\text{C}$	$I_F > 5 \text{ mA}$
		NSL-28AA		1.0	$\%/^\circ\text{C}$	

Specifications subject to change without notice

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