



**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”.

**RELIABILITY**

CdS/CdSe photo resistors are temperature sensitive, it should be noted that operation of the photocell above +75°C does not usually lead to catastrophic failure but the photoconductive surface may be damaged leading to irreversible changes in sensitivity

Contact Luna for recommendations on specific test conditions and procedures.

**ABSOLUTE MAXIMUM RATINGS**

SYMBOL	MIN		MAX	UNITS	(TA)= 23°C UNLESS OTHERWISE NOTED
Isolation Voltage	-	-	2000	V	-
Operating Temperature	-40	to	+75	°C	-
Storage Temperature	-40	to	+75	°C	-
Soldering Temperature	-	-	+260	°C	>0.05" from case for > 5 sec.

**FEATURES**

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

**APPLICATIONS**

- Industrial sensing

**OPTO-ELECTRICAL PARAMETERS**

T<sub>a</sub> = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
<b>LED</b>					
Forward Current	<sup>1</sup>	-	-	4.0	mA
Forward Current	I <sub>f</sub> = 16mA	-	-	2.5	V
Reverse Current	V <sub>R</sub> = 4V	-	-	3.0	μA
<b>CELL</b>					
Maximum Cell Voltage	Peak AC or DC	-	-	60	V
Power Dissipation	<sup>1</sup>	-	-	50	mW
<b>COUPLED</b>					
On- Resistance	I <sub>f</sub> = 16 mA <sup>2</sup>	-	-	40	Ω
Off Resistance	10 sec after I <sub>f</sub> = 0 mA, 5 V dc on cell	500	-	-	KΩ
Rise Time	Time for the dark to light change in conductance to reach 63% of its final value	-	55	-	msec
Decay Time	Time to reach 100KΩ after removal of I <sub>f</sub> = 16mA	-	80	-	msec
Cell Temp. Coefficient	I <sub>f</sub> = > 5 mA	-	0.7	-	%/°C

**NOTE:**

1. Derate linearly to 0 at 75°C
2. The Rise Time, TR, is the time required for the dark to light change in conductance to reach 63% of its final value.
3. Print "NSL-32" and date code "YYWW"