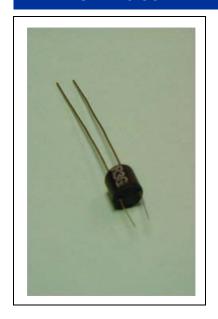
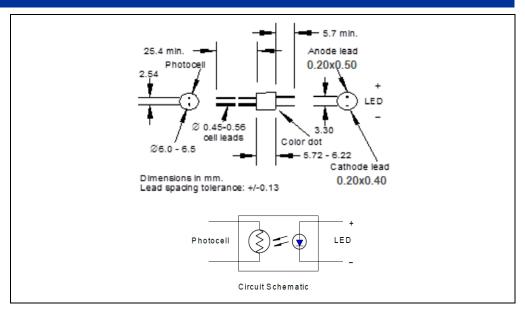


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# **Precision – Control – Results**





#### DESCRIPTION

This optocoupler, **NSL-32SR3**, 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**

This Luna high-reliability detector is in principle able to meet military test requirements (Mil-STD-750, Mil-STD-883) after proper screening and group test.

Contact Luna for recommendations on specific test conditions and procedures.

## **FEATURES**

- Compact, moisture resistant package
- Very low "on" resistance
- Low LED current
- Passive resistance output

### **APPLICATIONS**

Industrial

## **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 <sup>2</sup>	-	-	+260	°C	-

## NOTE:

- 1. 2 mm from case for <5 sec.
- 2. Derate linearly to 0 at 75°C
- 3. The Rise Time, TR, is the time required for the dark to light change in conductance to reach 63% of its final value.
- 4. Measured after 1 minute ON @ IF =20mA followed by 10 sec. OFF.
- 5. Print "NSL-32SR3" and date code YYWW.





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# **Precision – Control – Results**

# **OPTO-ELECTRICAL PARAMETERS**

T<sub>a</sub> = 23°C unless noted otherwise

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
LED					
Forward Current	-	-	-	25	mA
Forward Current	I <sub>F</sub> = 20mA	-	-	2.5	V
Reverse Current	V <sub>R</sub> =4V	-	-	10	μΑ
CELL					
Maximum Cell Voltage	Peak AC or DC	-	-	60	V
Power Dissipation	2	-	-	50	mW
COUPLED					
ON Resistance	I <sub>F</sub> = 20mA	-	-	60	Ω
ON Resistance	$I_F = 50 \text{mA}$	-	150	-	Ω
Off Resistance	10 sec after I <sub>F</sub> = V -0.5Vdc on cell	25	-	-	ΜΩ
Rise Time	Time to 63% of final conductance I <sub>F</sub> = 5mA		5	-	msec
Decay Time	Time to 100KΩ after removal of I <sub>f</sub> =5mA		10	-	msec
Cell Temp. Coefficient	I <sub>f</sub> >5mA	-	0.7	-	%/K

### NOTE:

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# **TYPICAL PERFORMANCE**

# PHOTOCELL RESISTANCE vs. LED CURRENT

