



# NSL-32SR3S (Sorted) Optocoupler

## Features

- Compact, moisture resistant package
- Low "on" resistance
- Low LED current
- Fast rise and decay time
- Passive resistance output
- Best distortion characteristics
- Ideal for applications requiring matched devices

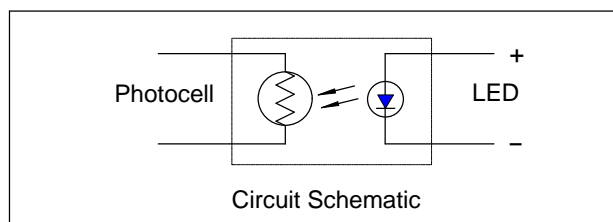
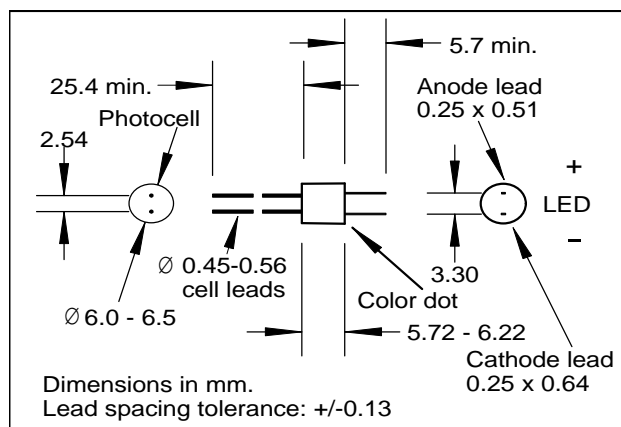
## Description

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 when the LED current is "on".

## Absolute Ratings Maximum

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) Packaged in ranges. Printed with part number, R3 followed by a letter. Individual ranges not available separately. Range distribution not guaranteed.



## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Symbol	Parameter	Min.	Typ.	Max.	Units	Test Conditions
<b>LED</b>						
I <sub>F</sub>	Forward Current			25	mA	
V <sub>F</sub>	Forward Voltage			2.5	V	I <sub>F</sub> = 20 mA
I <sub>R</sub>	Reverse Current			10	μA	V <sub>R</sub> = 4V
<b>Cell</b>						
V <sub>C</sub>	Maximum Cell Voltage			60	V	(Peak AC or DC)
P <sub>D</sub>	Power Dissipation			50	mW	(2)
<b>Coupled</b>						
R <sub>ON</sub>	On Resistance		60		Ω	I <sub>F</sub> = 20 mA
Range(3)	R3A	300		331		I <sub>F</sub> = 1 mA (guaranteed +/- 1 range)
	R3B	331		366		
	R3C	366		404		
	R3D	404		446		
	R3E	446		492		
	R3F	492		543		
	R3G	543		600		
R <sub>OFF</sub>	Off Resistance	25			MΩ	10 sec after I <sub>F</sub> = 0, 5Vdc on cell.
T <sub>R</sub>	Rise Time		5		msec	Time to 63% of final conductance @ I <sub>F</sub> = 5mA
T <sub>F</sub>	Decay Time		10		msec	Time to 100KΩ after removal of I <sub>F</sub> = 5mA
	Cell Temp Coefficient		0.7		%/°C	I <sub>F</sub> > 5 mA

Specifications subject to change without notice

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