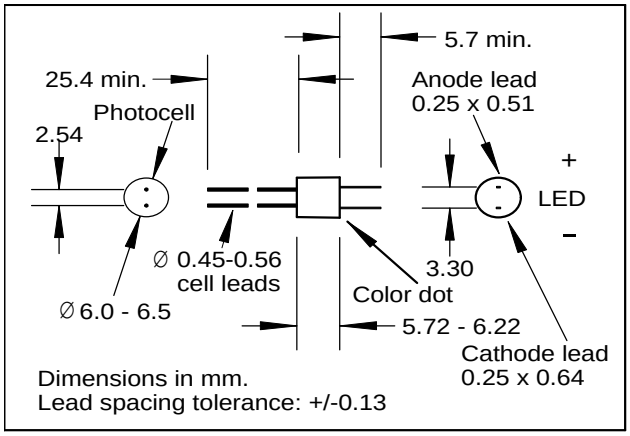
NSL-32SR2S (Sorted)
Optocoupler

Features

- Compact, moisture resistant package
- Lowest “on” resistance
- Very low LED current
- Passive resistance output
- Low distortion
- Ideal for applications requiring matched devices



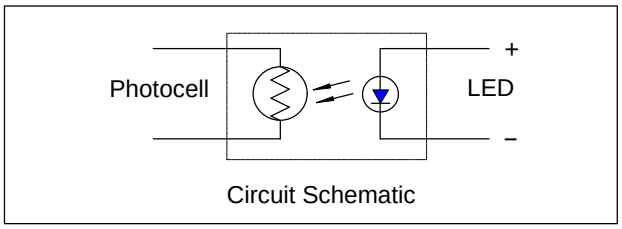
Description

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 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) Packaged in ranges. Printed with part number, R2 followed by a letter. Individual ranges not available separately. Range distribution is not guaranteed.



Circuit Schematic

Electrical Characteristics (T_A=25°C unless otherwise noted)

Symbol	Parameter	Min.	Typ.	Max.	Units	Test Conditions
LED						
I_F	Forward Current			25	mA	
V_F	Forward Voltage			2.5	V	I_F = 20 mA
I_R	Reverse Current			10	µA	V_R = 4V
Cell						
V_C	Maximum Cell Voltage			60	V	(Peak AC or DC)
P_D	Power Dissipation			50	mW	(2)
Coupled						
R_{ON}	On Resistance		40		Ω	I_F = 20 mA
Range(3)	R2A	100		110		I_F = 1 mA (guaranteed +/- 1 range)
	R2B	110		122		
	R2C	122		135		
	R2D	135		149		
	R2E	149		164		
	R2F	164		181		
	R2G	181		200		
R_{OFF}	Off Resistance	1	5		MΩ	10 sec after I_F = 0, 5Vdc on cell.
T_R	Rise Time		5		msec	Time to 63% of final conductance @ I_F = 20mA
T_F	Decay Time		80		msec	Time to 100KΩ after removal of I_F = 20mA
	Cell Temp Coefficient		0.7		%/°C	I_F > 5 mA

Specifications subject to change without notice 104539 REV 0

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