



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

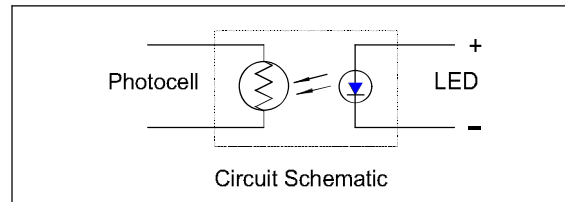
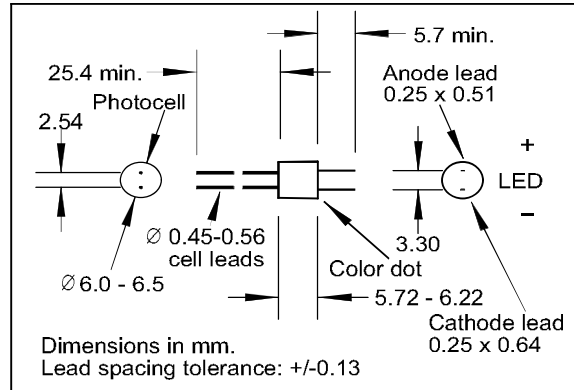
Description

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_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		60		Ω	I _F = 20 mA
Range(3)	R3A	300		331		I _F = 1 mA (guaranteed +/- 1 range)
	R3B	331		366		
	R3C	366		404		
	R3D	404		446		
	R3E	446		492		
	R3F	492		543		
	R3G	543		600		
R _{OFF}	Off Resistance	25			MΩ	10 sec after I _F = 0, 5Vdc on cell.
T _R	Rise Time		5		msec	Time to 63% of final conductance @ I _F = 5mA
T _F	Decay Time		10		msec	Time to 100KΩ after removal of I _F = 5mA
	Cell Temp Coefficient		0.7		%/°C	I _F > 5 mA

Specifications subject to change without notice

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