



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”.

FEATURES

- Compact, moisture resistant package
- Low LED current
- Very low “on” resistance
- Passive resistance output
- Low distortion

RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

APPLICATIONS

- Industrial

ABSOLUTE MAXIMUM RATINGS

SYMBOL	MIN		MAX	UNITS	
Isolation Voltage	-	-	2000	V	T _a = 23°C UNLESS OTHERWISE NOTED
Operating Temperature	-40	to	+75	°C	Non condensing
Soldering Temperature	-40	-	+75	°C	-
Soldering Temperature	-	-	+260	°C	>2 mm from case for < 5 sec.

NOTE:

1. Measure after 1 minute ON @ I_F = 20mA and followed by 10 sec OFF
2. Print “NSL-32SR2” followed by a letter A to G and date code YYWW
3. Package in ranges individual ranges not available separately. Range distribution is not guaranteed

OPTO-ELECTRICAL PARAMETERS

$T_a = 23^\circ\text{C}$ UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
LED					
Forward Current	-	-	-	25	mA
Forward Voltage	$I_f = 20 \text{ mA}$	-	-	2.5	V
Reverse Current	$V_R = 4\text{V}$	-	-	10	μA
CELL					
Maximum Cell Voltage	(Peak AC or DC)	-	-	60	V
Power Dissipation	Derate linearly to 0 at 75°C	-	-	50	mW
COUPLED					
On Resistance	$I_f = 20 \text{ mA}$	-	-	40	Ω
R2A	$I_f = 1 \text{ mA}$ (guaranteed ± 1 range)	100	-	124	Ω
R2B	-	124	-	150	Ω
R2C	-	150	-	177	Ω
R2D	-	177	-	205	Ω
R2E	-	205	-	234	Ω
R2F	-	234	-	266	Ω
R2G	-	266	-	300	Ω
Off Resistance ¹	10 sec after $I_f = 0 \text{ mA}$	1	5	-	M Ω
Rise Time	Time to reach 63% of final conductive @ $I_f = 16\text{mA}$	-	5	-	m sec
Decay Time	Time to reach 100K Ω from removal of $I_f = 16\text{mA}$	-	80	-	msec
Cell Temp. Coefficient	$I_f > 5\text{mA}$	-	0.7	-	%/ $^\circ\text{C}$

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TYPICAL PERFORMANCE

