



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”.

RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

FEATURES

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

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	>2mm 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” and date code YYWW

OPTO-ELECTRICAL PARAMETERS

T_a = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
LED					
Forward Current	-	-	-	25	mA
Forward Current	I _f = 20 mA	-	-	2.5	V
Reverse Current	V _R = 4V	-	-	10	μA
CELL					
Maximum Cell Voltage	Peak AC or DC	-	-	60	V
Power Dissipation	²	-	-	50	mW
COUPLED					
On Resistance	I _f =20 mA	-	-	40	Ω
	I _f =5 mA	-	140	-	Ω
Off Resistance	10 sec after I _f = V-0.5 Vdc on cell	25	5	-	MΩ
Rise Time	Time to reach 63% of final conductive @ I _f = 5mA	-	5	-	m sec
Decay Time	Time to reach 100KΩ from removal of I _f = 5mA	-	80	-	m sec
Cell Temp Coefficient	I _f > 5 mA	-	0.7	-	%/K

NOTE:

1. Derate linearly to 0 at 75°C
2. >2 mm from case for <5 sec.
3. "FULLTONE OPTO-1" and date code YYWW
4. Approved LED APC16792 to be used only

TYPICAL PERFORMANCE

PHOTOCELL RESISTANCE vs. LED CURRENT

