



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	>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

