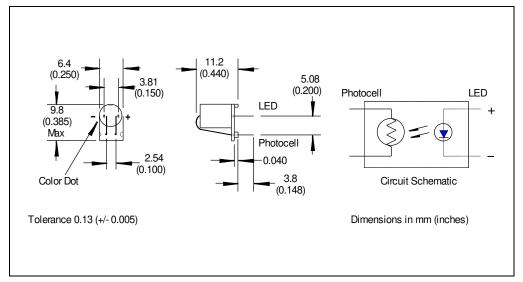


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### **Precision – Control – Results**





#### **DESCRIPTION**

This series of 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". These optocouplers are mounted on a lead spacer platform that facilitates mounting on a PCB. The different "on" resistance ranges are shown in table below.

#### **RELIABILITY**

CdS/CdSe photo resistors are temperature sensitive, it should be noted that operation of the photocell above +75°C does not usually lead to catastrophic failure but the photoconductive surface may be damaged leading to irreversible changes in sensitivity

Contact Luna for recommendations on specific test conditions and procedures.

#### **FEATURES**

- Compact, moisture resistant package
- Low LED current
- Passive resistance output

## **APPLICATIONS**

Industrial sensing

# **ABSOLUTE MAXIMUM RATINGS**

SYMBOL	MIN		MAX	UNITS	
Isolation Voltage	-	-	2000	V	T <sub>a</sub> = 23°C UNLESS OTHERWISE NOTED
Operating Temperature	-40	to	+75	°C	non condensing
Storage Temperature	-40	to	+75	°C	-
Soldering Temperature	-	to	+260	°C	>0.05" from case for <5 sec.



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# **OPTO-ELECTRICAL PARAMETERS**

T<sub>a</sub> = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
LED					
Forward Current	-	-	-	40	mA
Forward Voltage	I <sub>f</sub> = 20 mA	-	-	2.0	V
Reverse Current	$V_R = 4V$		-	100	μА
CELL				<u> </u>	·
Maximum Cell Voltage	(Peak AC or DC)	-	-	60	V
Power Dissipation	(1)	-	-	50	mW
COUPLED					
On Resistance	$I_f = 1 \text{ mA}, (3)$	-	-	-	-
NSL-32H-101		-	-	750	Ω
NSL-32H-102		0.75	-	0.96	ΚΩ
NSL-32H-103		0.96	-	1.65	ΚΩ
NSL-32H-104		1.65	-	2.80	ΚΩ
Off Resistance	10 sec after $I_f = 0$ mA, 4V dc on cell	500	-	-	ΚΩ
Rise Time	Time to 63% of final conductance @ $I_f = 16mA$	-	35	-	msec.
Decay Time	Time to reach 100 K $\Omega$ after removal of I <sub>f</sub> = 16 mA	-	-	500	msec.
Cell Temp. Coefficient	$I_f > 5 \text{ mA}$	-	1.0	-	%/°C

#### NOTE:

- Derate linearly to 0 at 75°C 1.
- 2. Spacer color is un-defined.
- 3.
- Measured after a dark history of 1 week.
  Print "NSL-32H-1XX" and date code "YYWW"