

NSL-32B-100 Series

Optocouplers

Features

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

Description

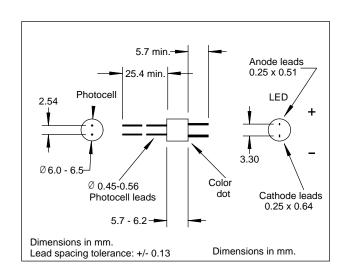
This optocoupler consists of an LED input optically coupled to a photocell. The photocell resistance is high when the LED current is "off" and low when the LED current is "on".

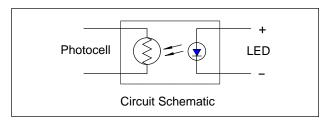
Absolute Maximum Ratings

Storage Temperature -40 to +75°C
Operating Temperature -40 to +75°C
Soldering Temperature (2) 260°C
Isolation Voltage (peak) 2000V

Note: (1) Derate linearly to 0 at 75°C

- (2) >2 mm from case for <5 sec.
- (3) measured after a dark history of 1 week.
- (4) The Rise Time, T_R, is the time required for the dark to light change in conductance to reach 63% [ie. (1 1/e)] of its final value.





Electrical Characteristics (T_A=25°C unless otherwise noted)

Symbol	Parameter	Min	Тур	Max	Units	Test Conditions
LED						
I _F	Forward Current			40	mΑ	(1)
V_{F}	Forward Voltage			2.0	V	$I_F = 16 \text{ mA}$
I_R	Reverse Current			100	μΑ	$V_R = 4V$
Cell						
V_{C}	Maximum Cell Voltage			60	V	(Peak AC or DC)
P_D	Power Dissipation			50	mW	(1)
Coupled						
R _{ON}	On Resistance:					$I_F = 1 \text{ mA} (3)$
	NSL-32B-101			750	Ω	
	NSL-32B-102	0.75		0.96	KΩ	
	NSL-32B-103	0.90		1.65	KΩ	
	NSL-32B-104	1.54		2.80	ΚΩ	
R _{OFF}	Off Resistance	500			ΚΩ	10 sec after I _F = 0, 4Vdc on cell.
T _R	Rise Time		3.5		msec	Time to 63% of final conductance @ I _F = 16mA (4)
T _F	Decay Time			500	msec	Time to $100K\Omega$ after removal of $I_F = 16mA$
	Cell Temp Coefficient		1.0		%/°C	I _F > 5 mA

Specifications subject to change without notice

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