NSL-28 & NSL-28AA

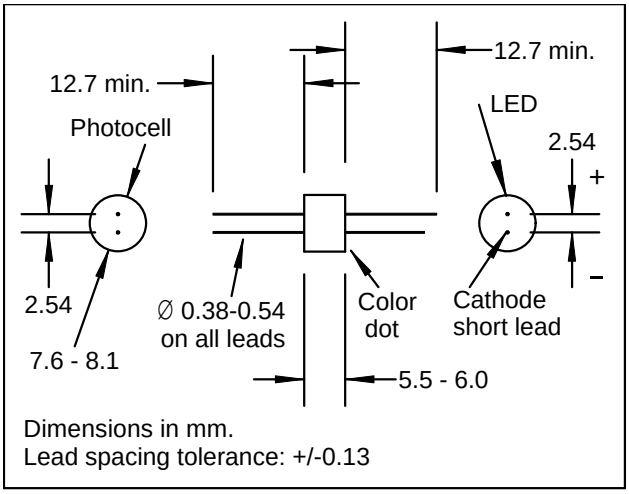
Optocoupler

Features

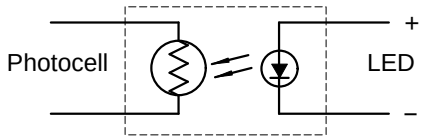
- Compact, moisture resistant package
- Low LED current
- Passive resistance output

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 resistance when the LED current is "on".



Dimensions in mm.
Lead spacing tolerance: +/-0.13



Circuit Schematic

Absolute Maximum Ratings

Storage Temperature	-40 to +75°C
Operating Temperature	-40 to +75°C
Soldering Temperature (1)	260°C
Isolation Voltage (peak)	2000V

Note: (1) >2 mm from case for <5 sec.
(2) Derate linearly to 0 at 75°C
(3) The Rise Time, T_R, is the time required for the dark to light change in conductance to reach 63% of its final value.

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

Symbol	Parameter		Min	Typ	Max	Units	Test Conditions
LED							
I_F	Forward Current				40	mA	(2)
V_F	Forward Voltage				2.5	V	I_F = 16 mA
I_R	Reverse Current				3.0	µA	V_R = 4V
Cell							
V_C	Maximum Cell Voltage				100	V	(Peak AC or DC)
P_D	Power Dissipation				50	mW	(2)
Coupled							
R_{ON}	On Resistance:	NSL-28			400	Ω	I_F = 20 mA
		NSL-28AA			2.5	KΩ	
		NSL-28AA		5		KΩ	I_F = 1 mA
R_{OFF}	Off Resistance:	NSL-28	10			MΩ	10 sec after I_F = 0, 5Vdc on cell.
		NSL-28AA	1			MΩ	
T_R	Rise Time:	NSL-28		5		msec	Time to 63% of final conductance
		NSL-28AA		0.5		msec	@ I_F = 16mA (3)
T_F	Decay Time	NSL-28		80		msec	Time to 100KΩ after removal of I_F = 16mA
		NSL-28AA		60		msec	
	Cell Temp Coefficient:	NSL-28		0.7		%/°C	I_F > 5 mA
		NSL-28AA		1.0		%/°C	

Specifications subject to change without notice

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