



FEATURES

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

This NSL-34 / 34AA optoisolator consists of an LED input optically coupled to a TO-8 open photocell. The photocell resistance is high when the LED current is "off" and low when the LED current is "on"

DESCRIPTION

APPLICATIONS

- Industrial

ABSOLUTE MAXIMUM RATING

(TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{ISO}	Isolation Voltage (RMS)		7000	V
T_{OP}	Operating Temperature	-40	+75	°C
T_{Stg}	Storage Temperature	-40	+75	°C
T_S	Soldering Temperature		+260	°C

Note:

- (1) Derate linearly to 0 at 75°C
- (2) >2 mm from case for <5 sec.
- (3) The Rise Time, TR, is the time required for the dark to light change in conductance to reach 63% of its final value
- (4) Print "NSL-34 / 34AA" and date code "YYWW" on housing.

RELIABILITY

Contact API for recommendations on specific test conditions and procedures.

ELECTRO-OPTICAL CHARACTERISTICS

(TA)= 23°C, UNLESS OTHERWISE NOTED

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
LED						
I_F	Forward Current				40	mA
V_F	Forward Voltage	$I_F = 20$ mA			2.5	V
V_R	Reverse Voltage				3.0	V
Cell						
V_C	Maximum Cell Voltage	(Peak AC or DC)			3.5	KV
P_D	Power Dissipation	(1)			400	mW
Coupled						
R_{ON}	On Resistance					
		NSL-34 $I_F = 16$ mA			1.2	MΩ
		NSL-34AA $I_F = 5$ mA			3.0	MΩ
R_{OFF}	Off Resistance	5 sec after $I_F = 0$ mA	1000			MΩ
T_R	Rise Time	Time to 63% of final conductance @ $I_F = 16$ mA (3)		3.5		msec
T_F	Decay Time	Time to 100MΩ after removal of $I_F = 16$ mA		20		msec
T_C	Cell Temp. Coefficient	$I_F > 5$ mA		0.6		%/°C

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