NSL-33-007

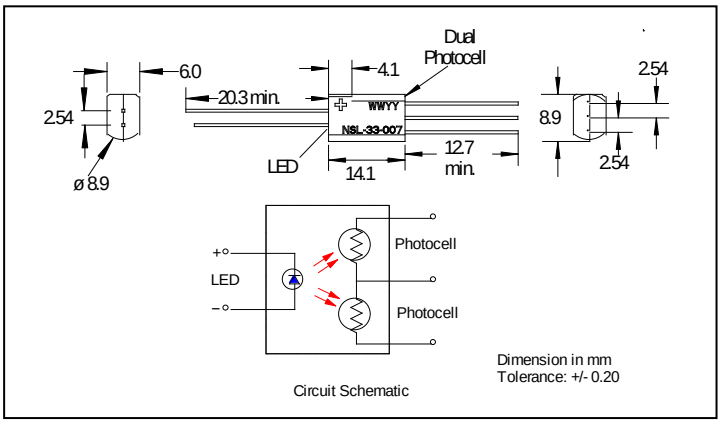
CdS Dual Output Optocoupler

Features

- Compact moisture resistance package
- Best distortion characteristics
- Dual passive resistance output
- Assembly RoHS compliance except Cd in photocell

Description

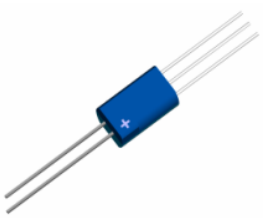
This optocoupler consists of an LED coupled to a dual photocell. The photocell resistance is high when the LED current is “off” and low when the LED current is “on”.

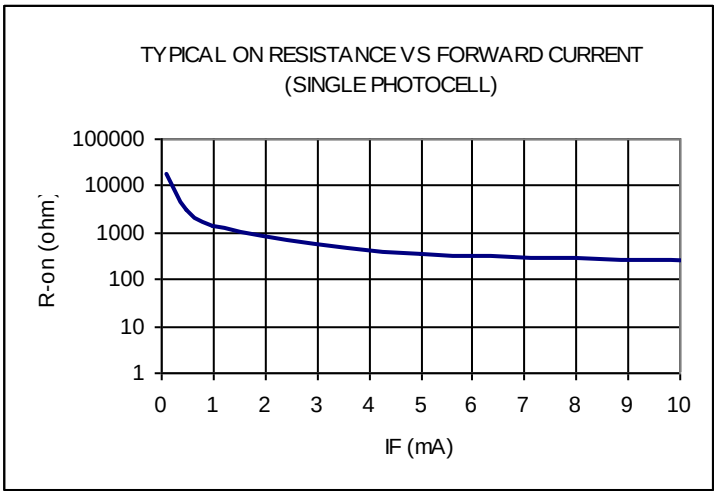


Absolute Maximum Ratings

Storage Temperature	-40° C to +75°C
Operating Temperature	-40° C 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) M_L is the percent difference between the photocell halves with the higher resistance used as the reference.





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

Symbol	Parameter	Min.	Typ.	Max.	Units	Test Conditions
LED						
I_F	Forward Current			20	mA	
V_F	Forward Voltage		2.1		V	I_F = 20 mA
I_R	Reverse Current			10	µA	V_R = 4V
Photocell						
V_C	Maximum Cell Voltage			100	V	(Peak AC or DC)
P_D	Power Dissipation			30	mW	(2)
Coupled						
R_{ON}	On Resistance			700	Ω	I_F = 4.6 mA
R_{OFF}	Off Resistance	25			MΩ	10 sec after I_F = 0, 5Vdc on cell.
T_R	Rise Time		1.2		msec	Time to 63% of final conductance @ I_F = 4.6mA
T_F	Decay Time		2.1		msec	Time to 37% of final conductance after removal of I_F = 4.6mA
T_C	Cell Temp Coefficient		0.7		%/°C	I_F > 4.6 mA
M_L	Light Resistance Matching			20	%	(3)

Specifications subject to change without notice. REV 04/22-14

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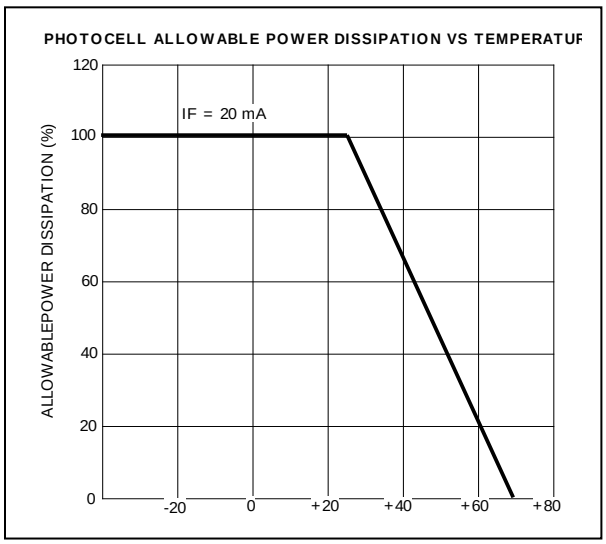

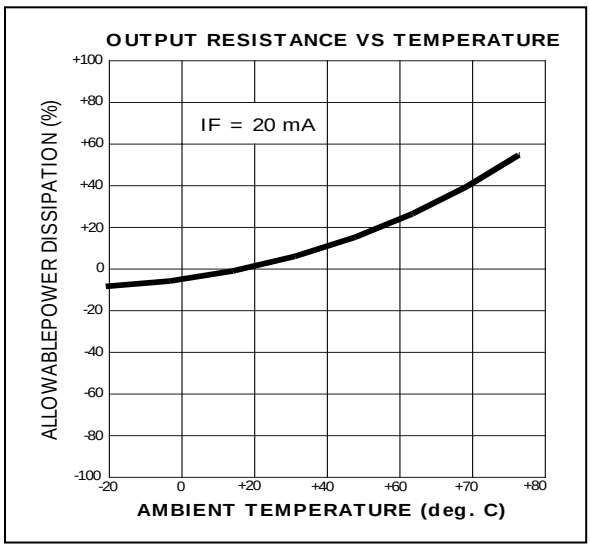

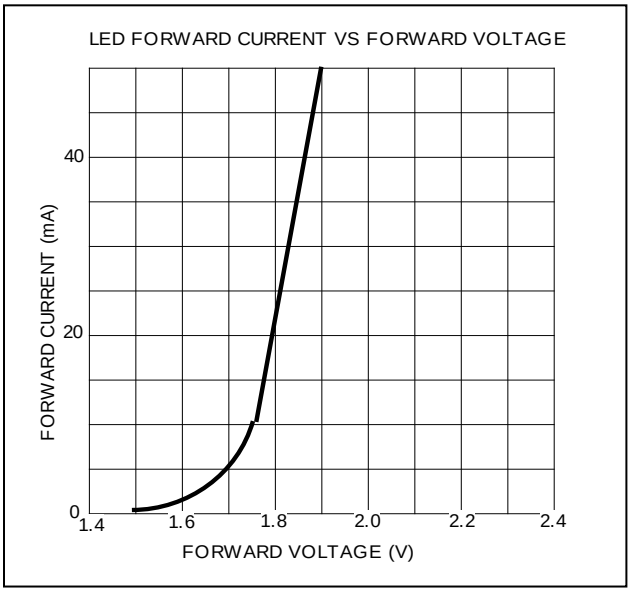

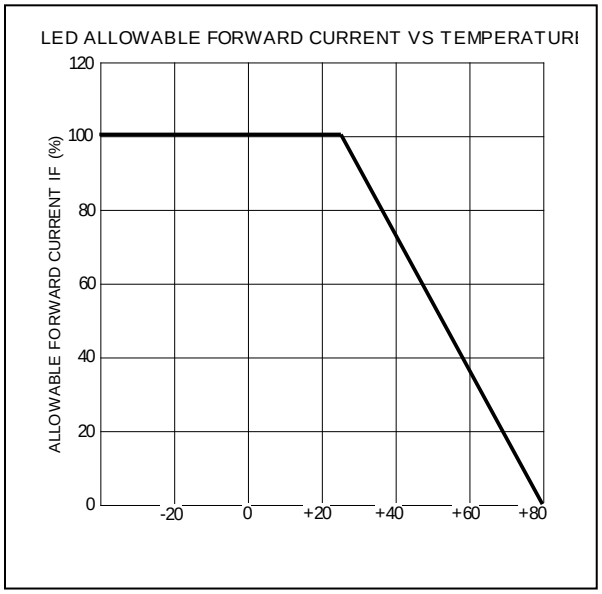

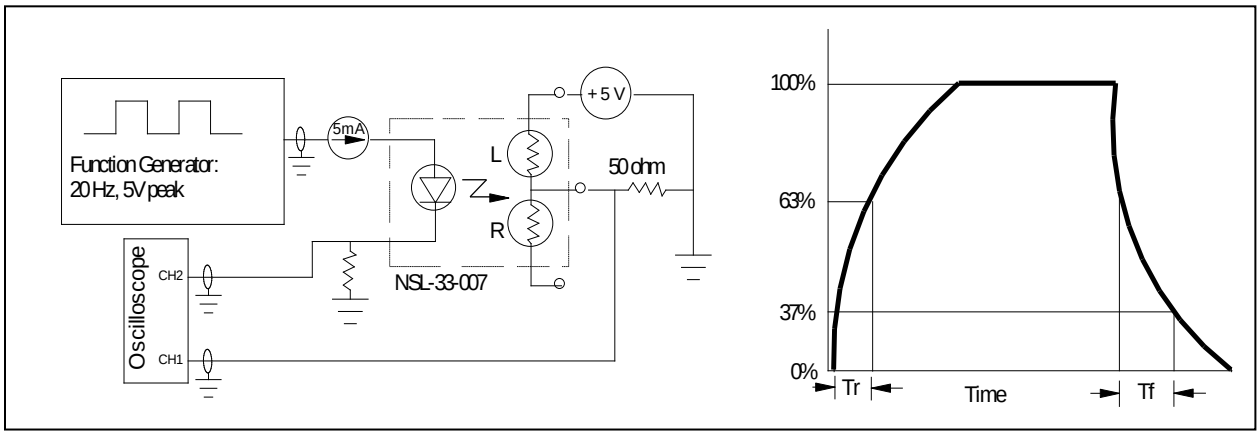

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