REED SWITCH

ORD211

General Purpose Ultraminiature (Low-level Load 24 V Max.)

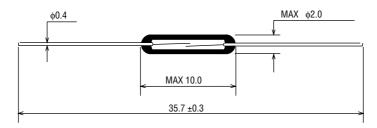
GENERAL DESCRIPTION

The ORD211 is a small single-contact reed switch designed for general control of low-level loads less than 24 V. The contacts are sealed within the glass tube with inert gas to maintain contact reliability.

Features

- (1) Reed contacts are hermetically sealed within a glass tube with inert gas and do not receive any influence from the external atmospheric environment.
- (2) Quick response
- (3) The structure comprises an operating system and electrical circuits coaxially. Reed switches are suited to applications in radio frequency.
- (4) Reed switches are compact and light weight.
- (5) Superior corrosion resistance and wear resistance of the contacts assures stable switching operation and long life.
- (6) With a permanent magnet installed, reed switches economically and easily become proximity switches.

External Dimensions (Unit:mm)



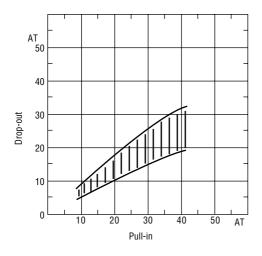
APPLICATIONS OF REED SWITCHES

- 1. Automotive electronic devices
- 2. Control equipment
- 3. Communication equipment
- 4. Measurement equipment
- 5. Household appliances

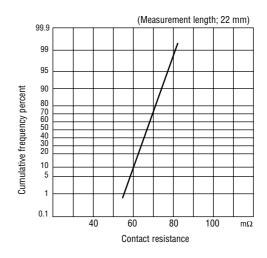
ELECTRICAL CHARACTERISTICS

Parameter	Cymahal	Condition	Rated Value			11:4
	Symbol		Min.	Тур.	Max.	Unit
Pull-in Value	PI	_	10	_	40	AT
Drop-out Value	D0	_	5	_	_	AT
Contact Resistance	CR	_	_	_	100	mΩ
Breakdown Voltage	_	_	150	_	_	VDC
Insulation Resistance	_	_	10 ⁹	_	_	Ω
Electrostatic Capacitance	_	_	_	_	0.2	pF
Contact Rating	_	_	_	_	1.0	VA
Maximum Switching Voltage	_	_	_	_	24 AC	V
Maximum Switching Current	_	_	_	_	0.1	А
Maximum Carry Current	_	_	_	_	0.3	А

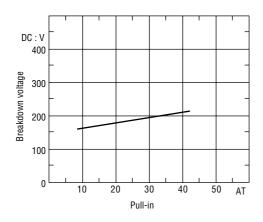
(1) Drop-out vs. Pull-in



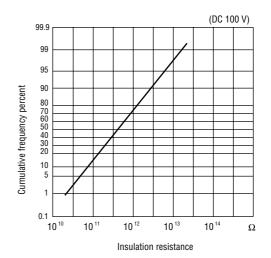
(2) Contact resistance



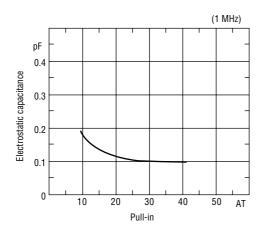
(3) Breakdown voltage



(4) Insulation resistance



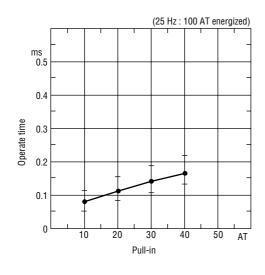
(5) Electrostatic capacitance



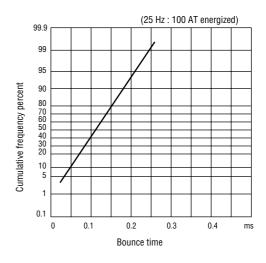
OPERATING CHARACTERISTICS

Parameter		Linia		
	Min.	Тур.	Max.	Unit
Operate Time	_	_	0.3	ms
Bounce Time	_	_	0.3	ms
Release Time	_	_	0.05	ms
Resonant Frequency	7000	7500	8000	Hz
Maximum Operating Frequency	_	_	500	Hz

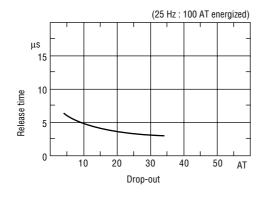
(1) Operate time



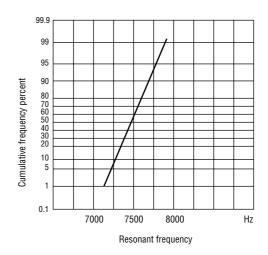
(2) Bounce time



(3) Release time

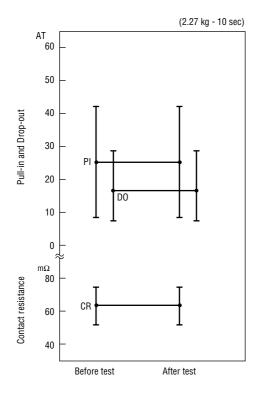


(4) Resonant frequency

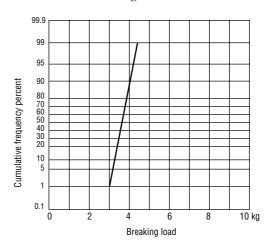


MECHANICAL CHARACTERISTICS

(1) Lead tensile test (static load)

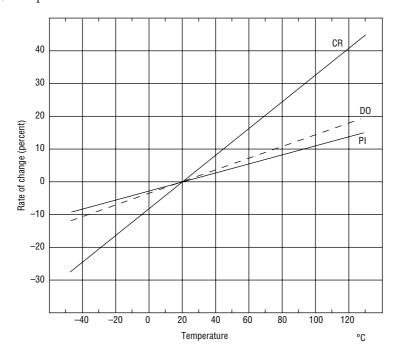


(2) Lead tensile strength

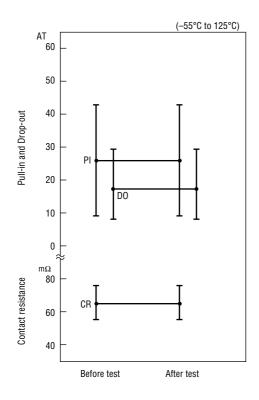


ENVIRONMENTAL CHARACTERISTICS

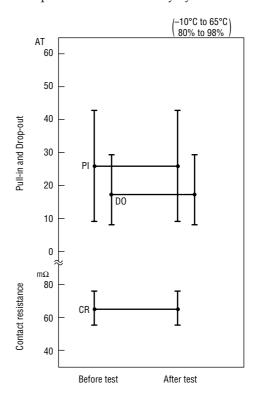
(1) Temperature characteristics



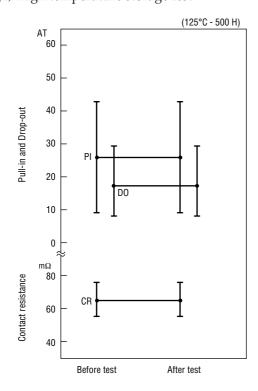
(2) Temperature cycle



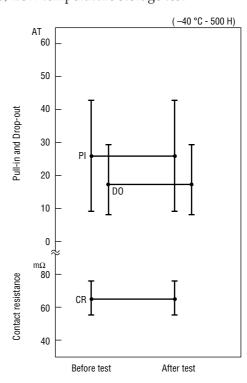
(3) Temperature and humidity cycle



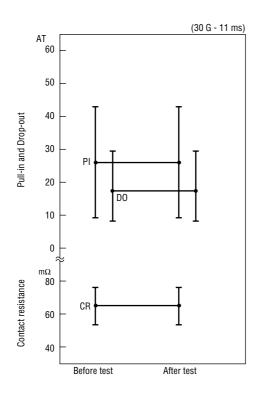
(4) High temperature storage test

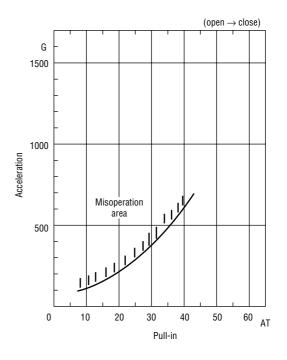


(5) Low temperature storage test

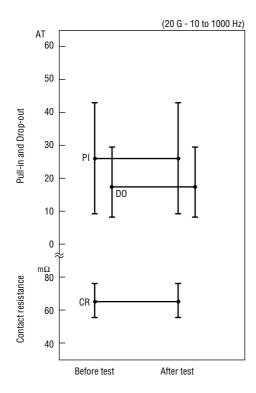


(6) Shock test





(7) Vibration test

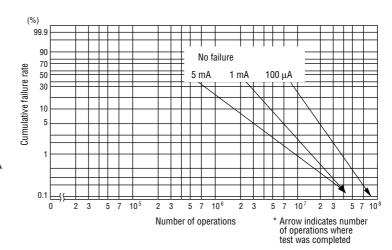


LIFE EXPECTANCY DATA: ORD211

Load conditions

Voltage: 5 VDC

Current: 100 µA, 1 mA, 5 mA Load : Resistive load

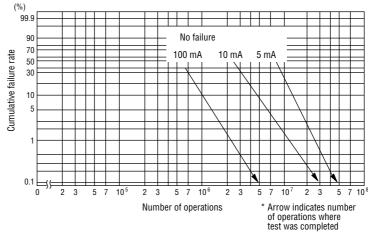


Load conditions

Voltage: 12 VDC

Current: 5 mA, 10 mA, 100 mA

Load : Resistive load



Load conditions

Voltage: 24 VDC

Current: 1 mA, 10 mA, 50 mA

Load : Resistive load

