

REED SWITCH

ORD9216

General Purpose Miniature

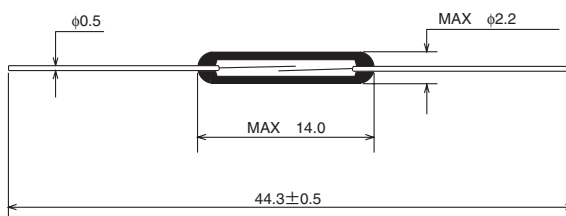
■ GENERAL DESCRIPTION

The ORD9216 is a small single-contact reed switch designed for general control of medium-level loads less than 100 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 the operating parts and electrical circuits arranged coaxially. Reed switches are suited to applications in radio frequency operation.
- (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

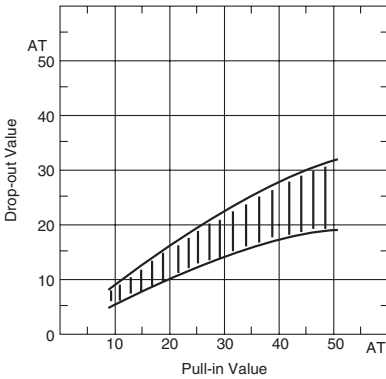
- Control equipment
- Communication equipment
- Measurement equipment
- Household appliances

■ ELECTRICAL CHARACTERISTICS

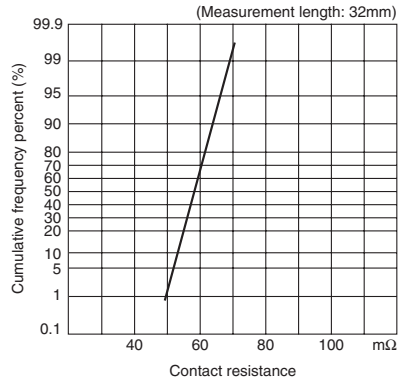
Parameter	Rated value	Unit
Pull-in Value (PI)	10~50	AT
Drop-out Value (DO)	5min	AT
Contact resistance (CR)	100max	mΩ
Breakdown voltage	150min	VDC
Insulation resistance	10 ⁹ min	Ω
Electrostatic capacitance	0.3max	pF
Contact rating	10	VA
Maximum switching voltage	100 $\frac{DC}{AC}$	V
Maximum switching current	0.5	A
Maximum carry current	1.0	A

3

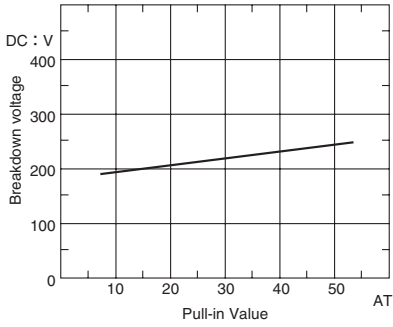
(1) Drop-out Value vs. Pull-in Value



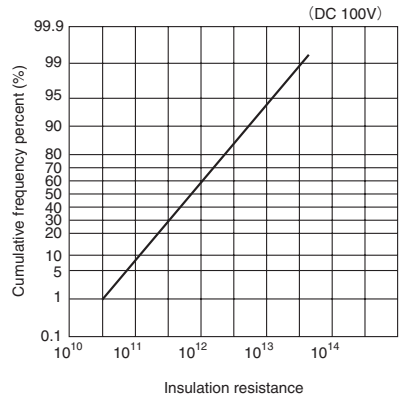
(2) Contact resistance



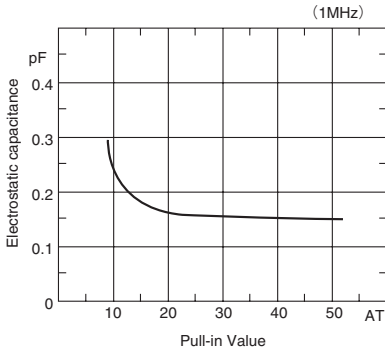
(3) Breakdown voltage



(4) Insulation resistance



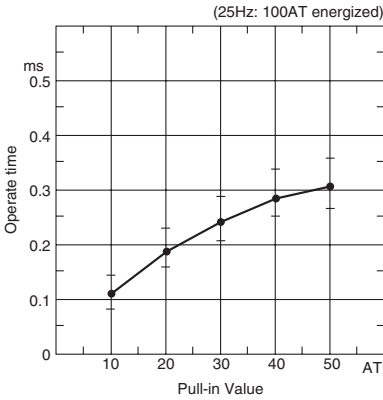
(5) Electrostatic capacitance



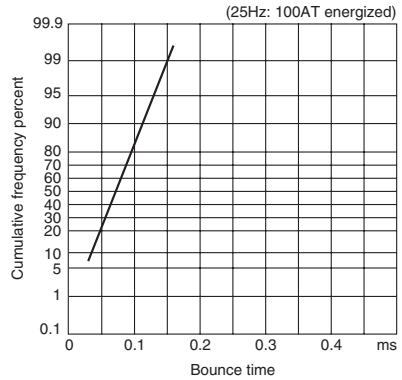
■ OPERATING CHARACTERISTICS

Parameter	Rated value	Unit
Operate time	0.4max	ms
Bounce time	0.3max	ms
Release time	0.05max	ms
Resonant frequency	5000±400	Hz
Maximum operating frequency	500	Hz

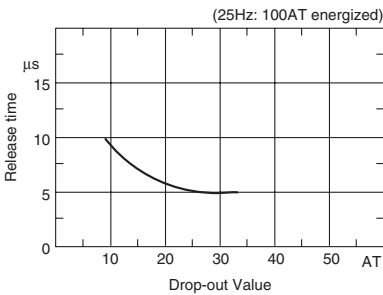
(1) Operate time



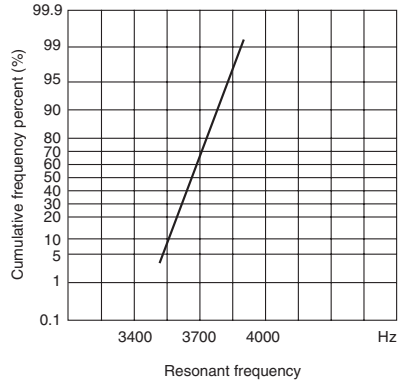
(2) Bounce time



(3) Release time



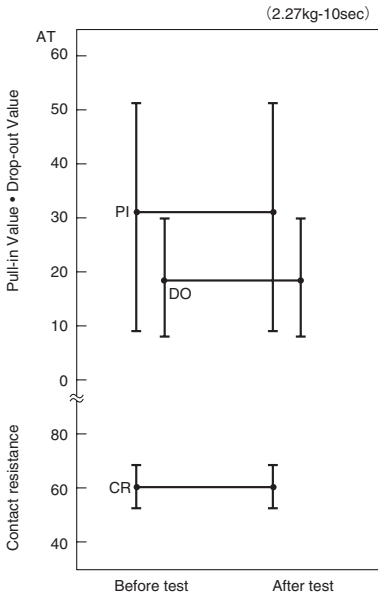
(4) Resonant frequency



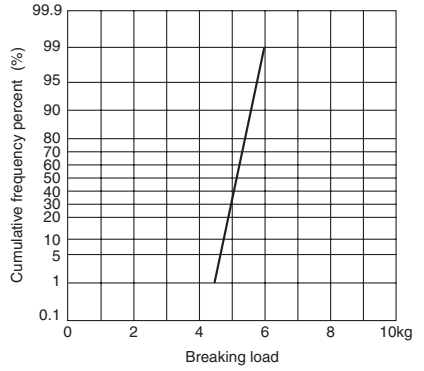
3

■ MECHANICAL CHARACTERISTICS

(1) Lead tensile test (static load)



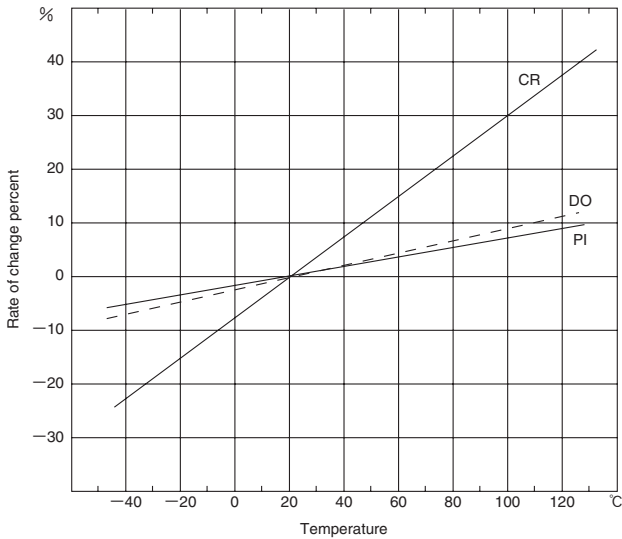
(2) Lead tensile strength



3

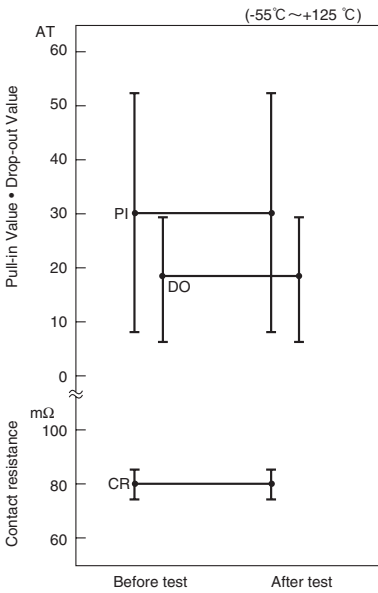
■ ENVIRONMENTAL CHARACTERISTICS

(1) Temperature characteristics

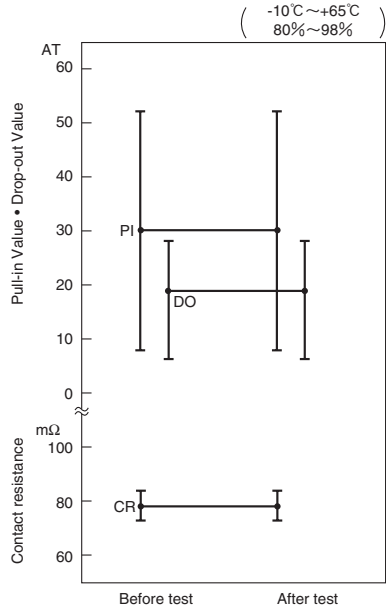


3

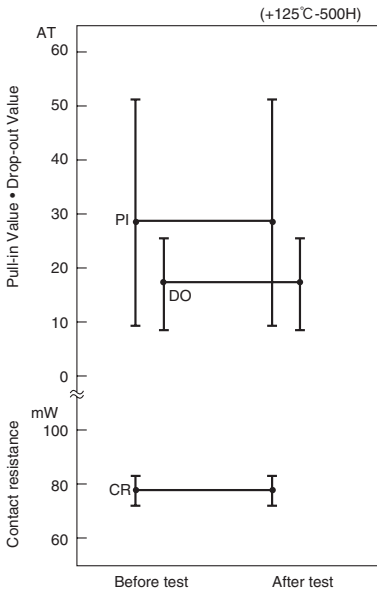
(2) Temperature cycle



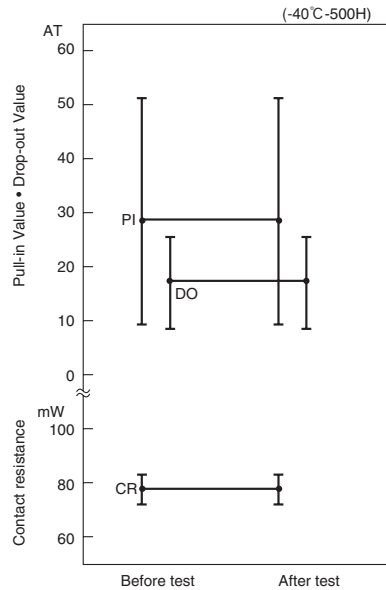
(3) Temperature and humidity cycle



(4) High temperature storage test

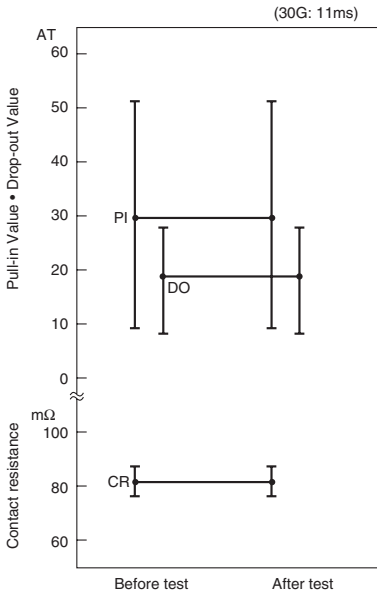


(5) Low temperature storage test

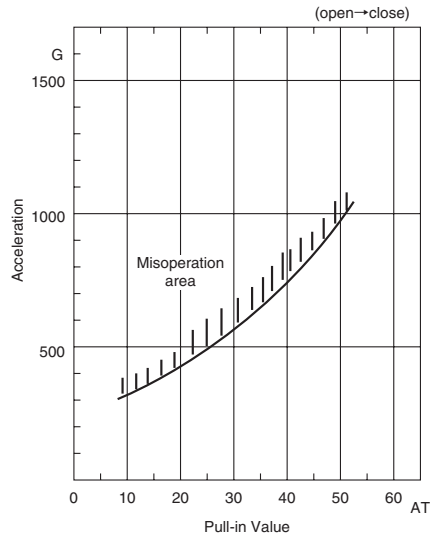


(6) Shock test

1) Electrical characteristics

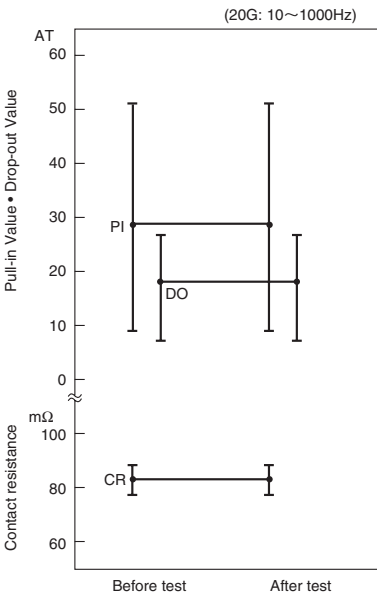


2) Misoperation area



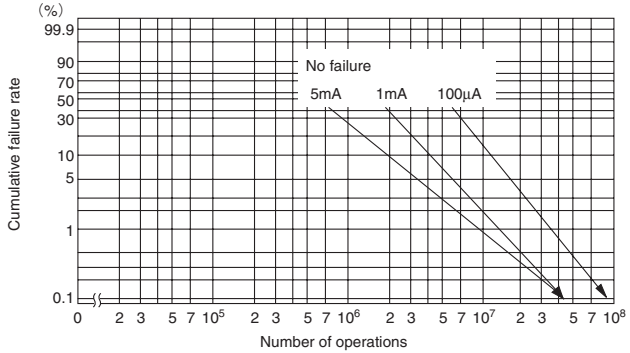
3

(7) Vibration test



■ LIFE EXPECTANCY DATA: ORD9216

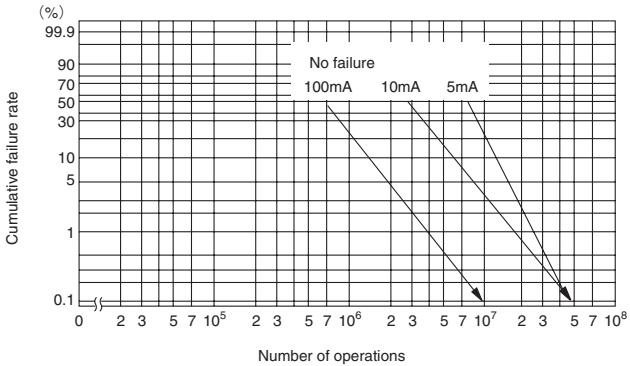
Load conditions
 Voltage: 5VDC
 Current: 100µA 1mA , 5mA
 Load: Resistive load



* Arrow indicates number of operations where test was completed.

3

Load conditions
 Voltage: 12 VDC
 Current: 5mA, 10mA, 100mA
 Load: Resistive load



* Arrow indicates number of operations where test was completed.

Load conditions
 Voltage: 24 VDC
 Current: 100mA, 200mA, 400mA
 Load: Resistive load

