

REED SWITCH

ORD9215

General Purpose Miniature

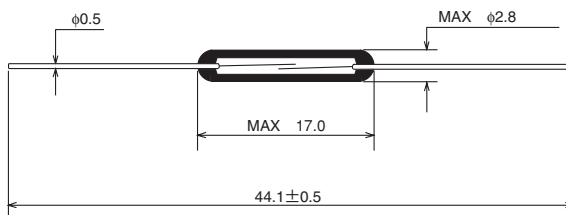
■ GENERAL DESCRIPTION

The ORD9215 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

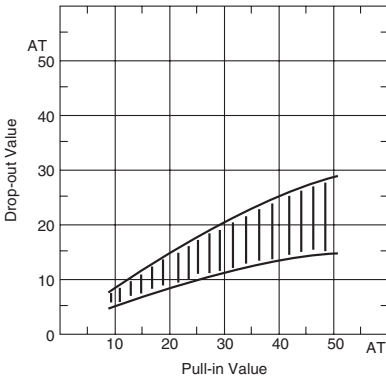
- Control equipment
- Communication equipment
- Measurement equipment
- Household appliances

■ ELECTRICAL CHARACTERISTICS

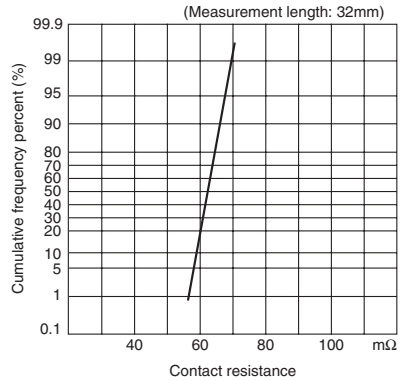
| Parameter | Rated value | Unit |
|---------------------------|---------------------|------|
| Pull-in Value (PI) | 10~50 | AT |
| Drop-out Value (DO) | 4min | AT |
| Contact resistance (CR) | 100max | mΩ |
| Breakdown voltage | 150min | VDC |
| Insulation resistance | 10 ⁹ min | Ω |
| Electrostatic 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

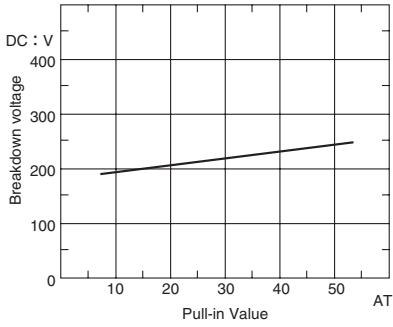
(1) Drop-out Value vs. Pull-in Value



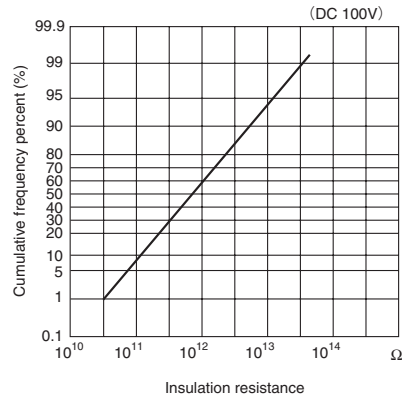
(2) Contact resistance



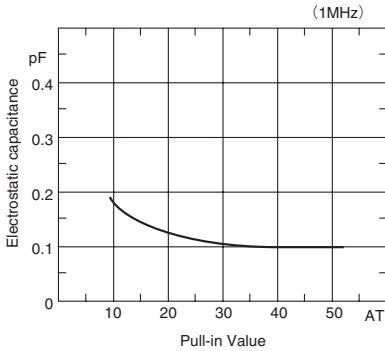
(3) Breakdown voltage



(4) Insulation resistance



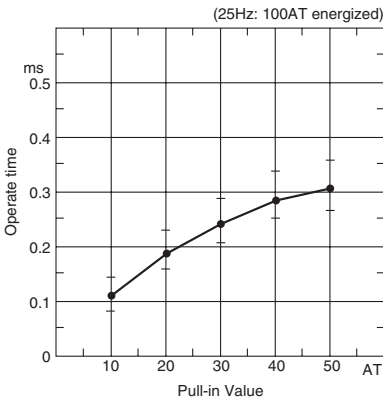
(5) Electrostatic capacitance



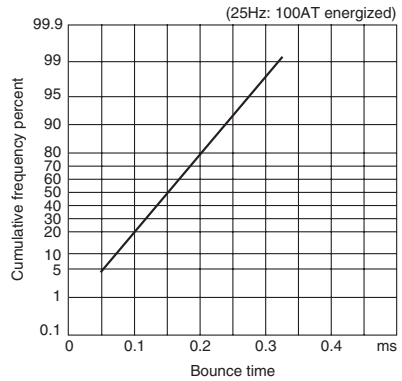
■ OPERATING CHARACTERISTICS

| Parameter | Rated value | Unit |
|-----------------------------|-------------|------|
| Operate time | 0.4max | ms |
| Bounce time | 0.4max | ms |
| Release time | 0.05max | ms |
| Resonant frequency | 3700±400 | Hz |
| Maximum operating frequency | 500 | Hz |

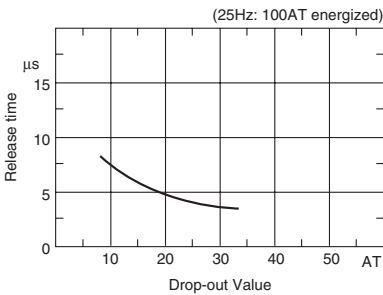
(1) Operate time



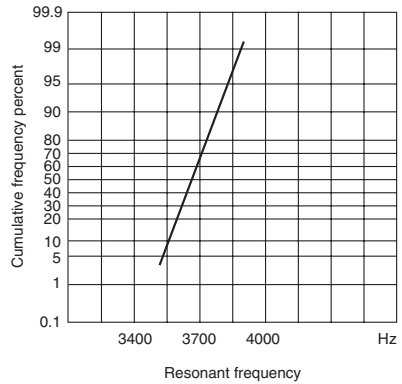
(2) Bounce time



(3) Release time



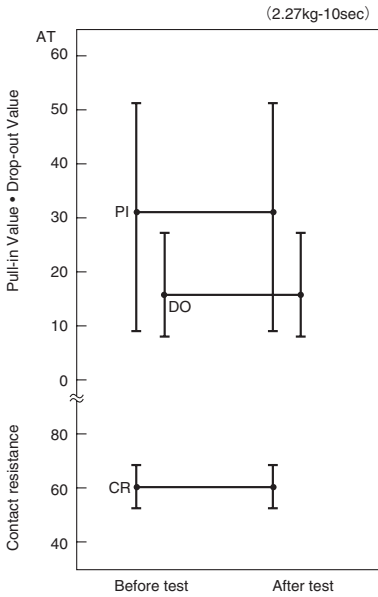
(4) Resonant frequency



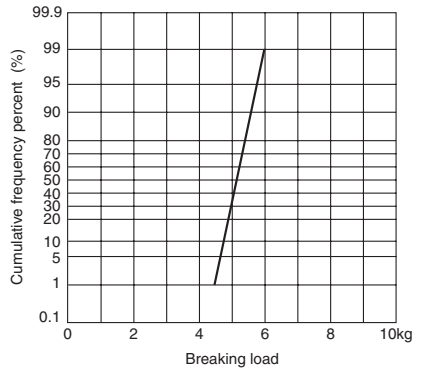
3

■ MECHANICAL CHARACTERISTICS

(1) Lead tensile test (static load)



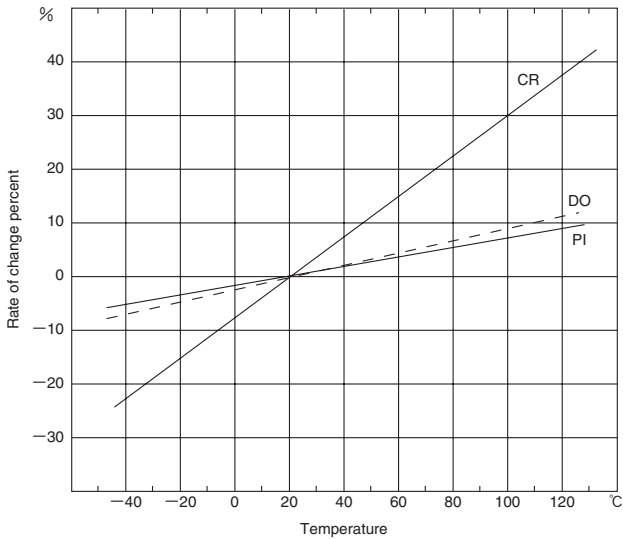
(2) Lead tensile strength



3

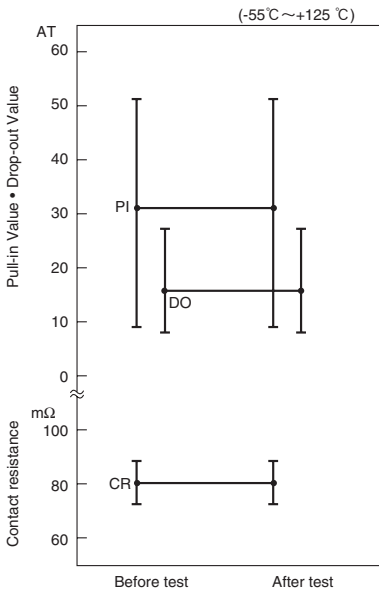
■ ENVIRONMENTAL CHARACTERISTICS

(1) Temperature characteristics

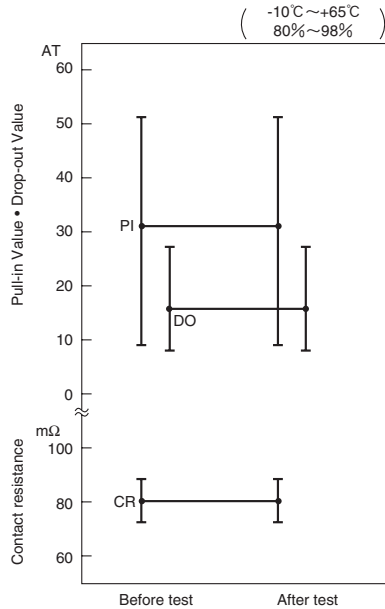


3

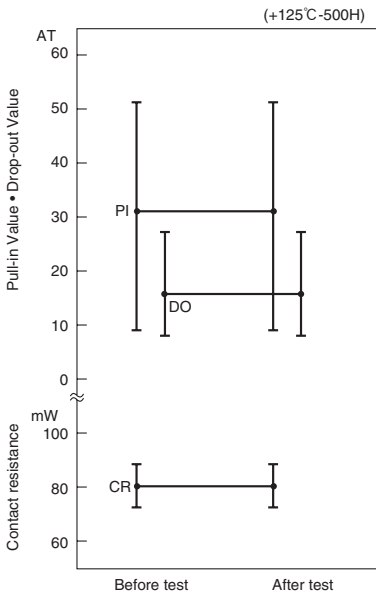
(2) Temperature cycle



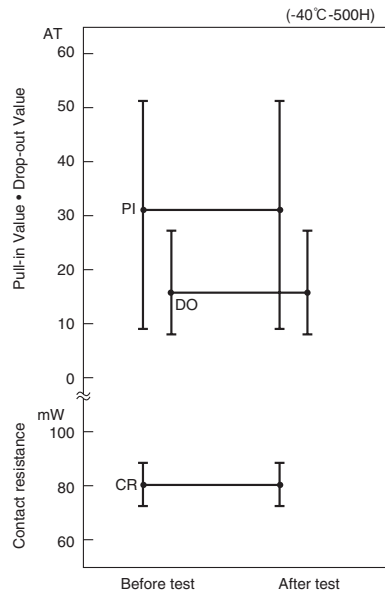
(3) Temperature and humidity cycle



(4) High temperature storage test

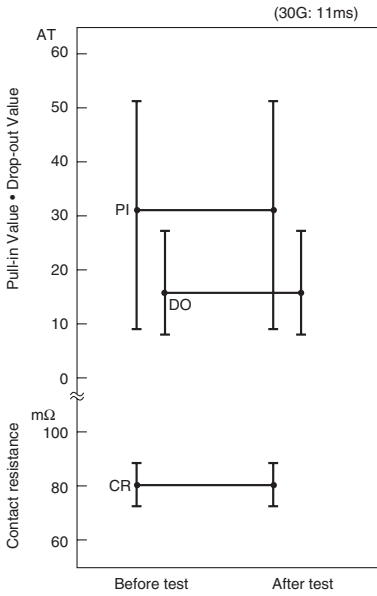


(5) Low temperature storage test

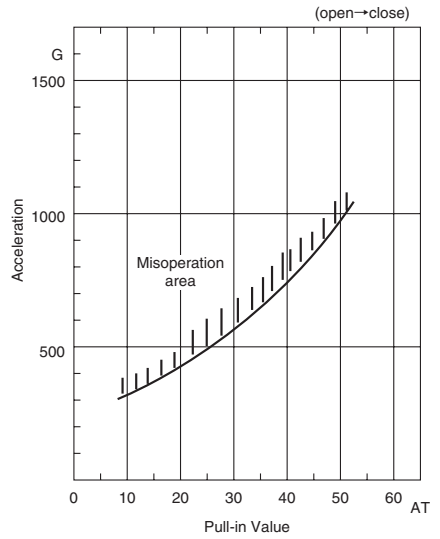


(6) Shock test

1) Electrical characteristics

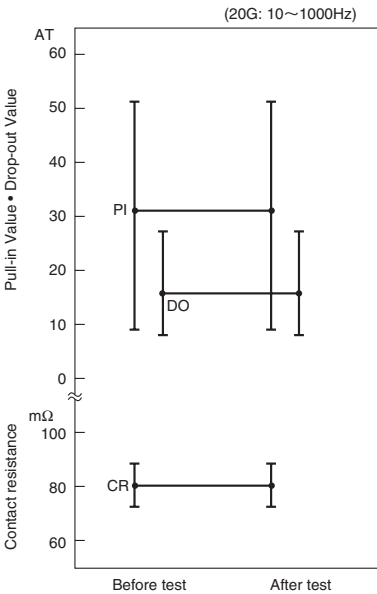


2) Misoperation area



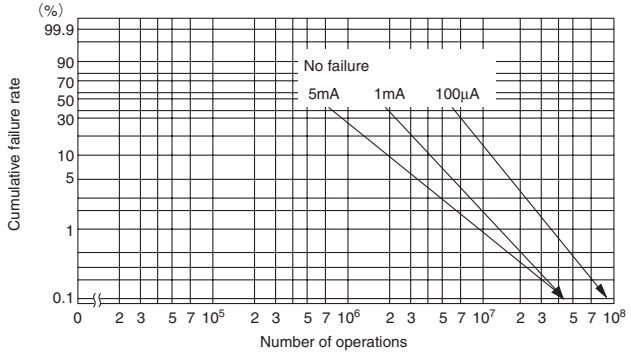
3

(7) Vibration test



■ LIFE EXPECTANCY DATA: ORD9215

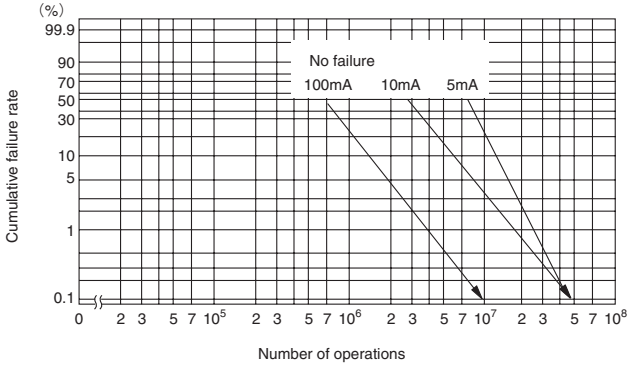
Load conditions
 Voltage: 5VDC
 Current: 100µA 1mA , 5mA
 Load: Resistive load



* Arrow indicates number of operations where test was completed.

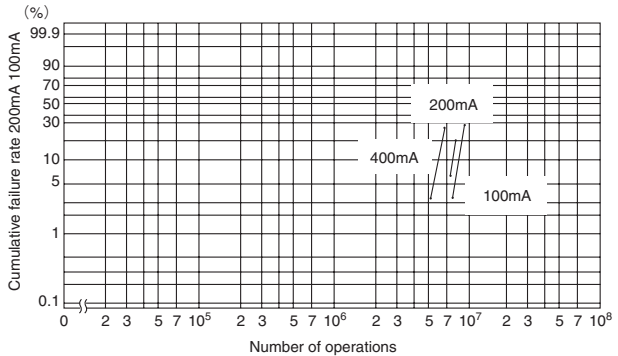
3

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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Standex Electronics:](#)

[ORD9215/10-15 AT](#) [ORD9215/15-20 AT](#)