

# REED SWITCH

## ORD324H

General purpose miniature-type, long lead

### ■ GENERAL DESCRIPTION

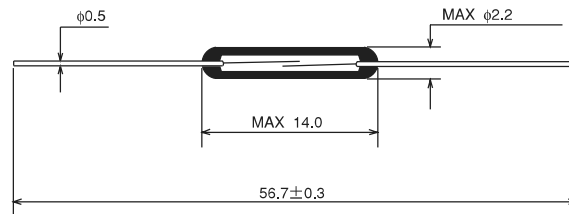
The ORD324H is a small single-contact reed switch designed for general control of low-level loads less than 200V. The contacts are sealed within the glass tube with inert gas to maintain contact reliability.

### ■ FEATURES

- (1) Hermetically sealed within a glass tube with inert gas, reed contacts are not influenced by the external atmospheric environment.
- (2) Quick response
- (3) Comprising of operating parts and electrical parts arranged coaxially, reed switches are suited to high-frequency applications.
- (4) Compact and light weight.
- (5) Superior corrosion resistance and wear resistance of the contacts assures stable switching operation and long life.
- (6) Economically and easily becomes a proximity switch when paired with a magnet.

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### ■ EXTERNAL DIMENSIONS (Unit: mm)



### ■ APPLICATIONS

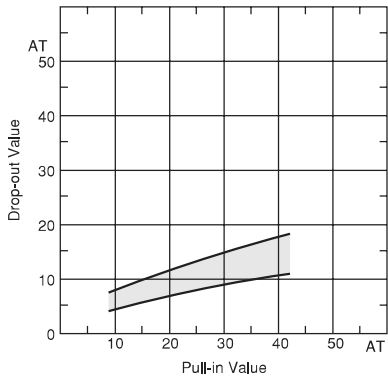
- Automotive electronic devices
- Control equipment
- Communication equipment
- Measurement equipment
- Household appliances

■ ELECTRICAL CHARACTERISTICS

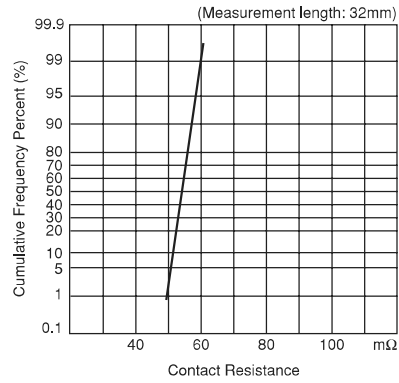
| Parameter                 | Rated value          | Unit |
|---------------------------|----------------------|------|
| Pull-in Value (PI)        | 10~40                | AT   |
| Drop-out Value (DO)       | 3min                 | AT   |
| Contact Resistance (CR)   | 100max               | mΩ   |
| Breakdown Voltage         | 250min               | VDC  |
| Insulation Resistance     | 10 <sup>10</sup> min | Ω    |
| Electrostatic Capacitance | 0.3max               | pF   |
| Contact Rating            | 10                   | VA   |
| Maximum Switching Voltage | 200DC                | V    |
|                           | 150AC                | V    |
| Maximum Switching Current | 0.5                  | A    |
| Maximum Carry Current     | 1.0                  | A    |

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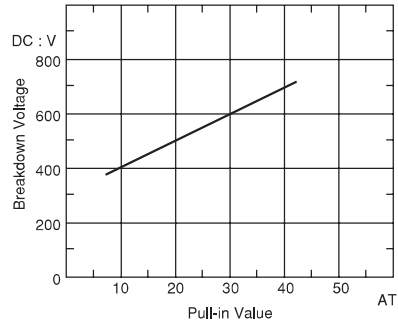
(1) Pull-in Value vs. Drop-out Value



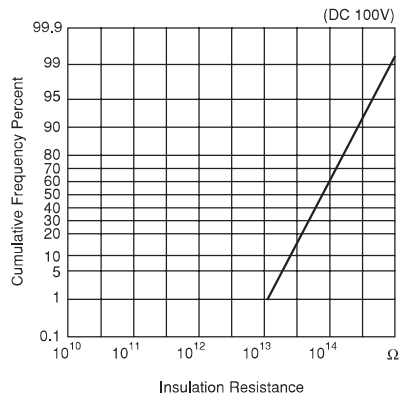
(2) Contact Resistance



(3) Breakdown Voltage

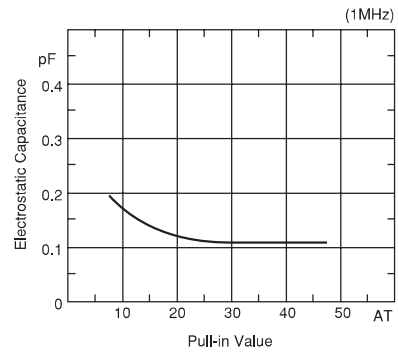


(4) Insulation Resistance



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(5) Electrostatic Capacitance

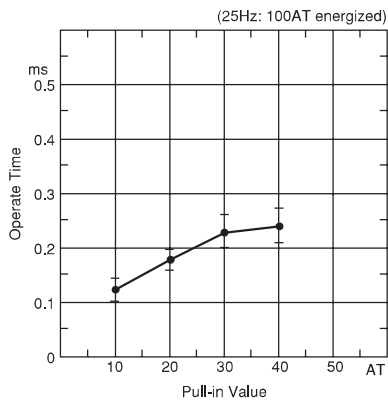


■ OPERATING CHARACTERISTICS

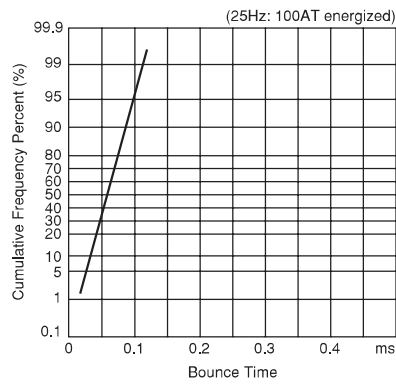
| Parameter                   | Rated Value | Unit |
|-----------------------------|-------------|------|
| Operate Time                | 0.4max      | ms   |
| Bounce Time                 | 0.3max      | ms   |
| Release Time                | 0.05max     | ms   |
| Resonant Frequency          | 5000±400    | Hz   |
| Maximum Operating Frequency | 500         | Hz   |

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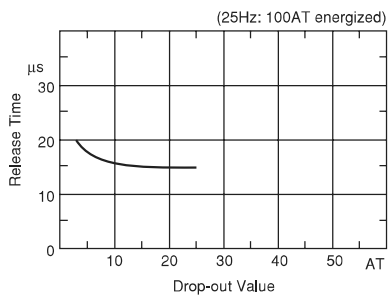
(1) Operate Time



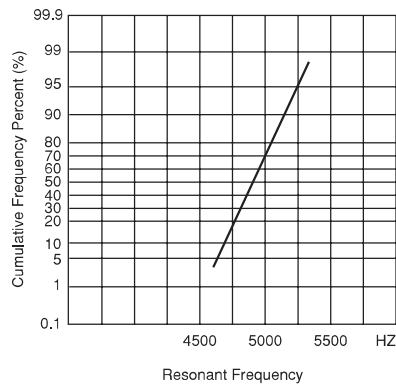
(2) Bounce Time



(3) Release Time

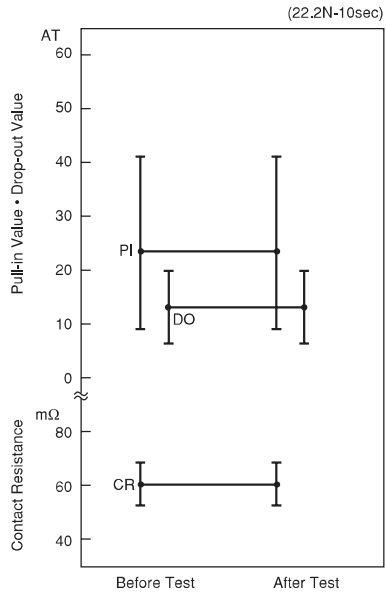


(4) Resonant Frequency

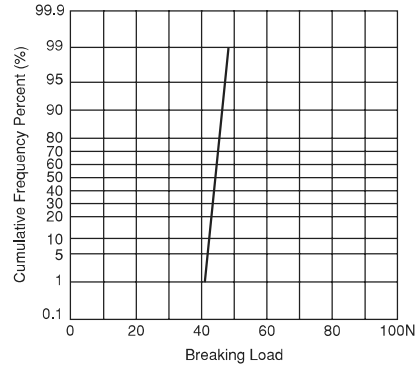


■ MECHANICAL CHARACTERISTICS

(1) Lead Tensile Test (Static Load)



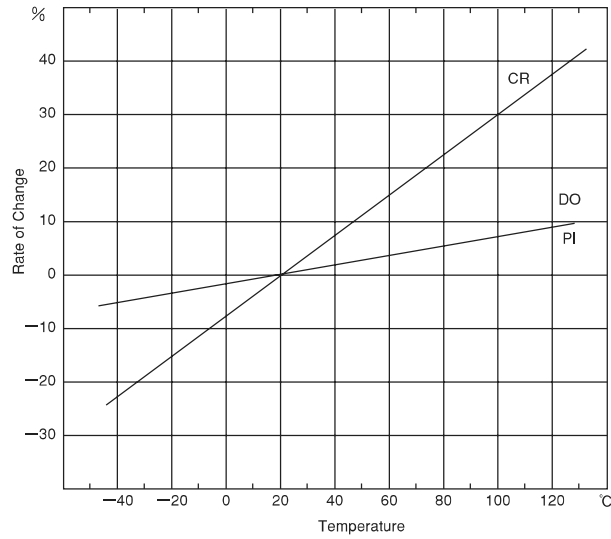
(2) Lead Tensile Strength



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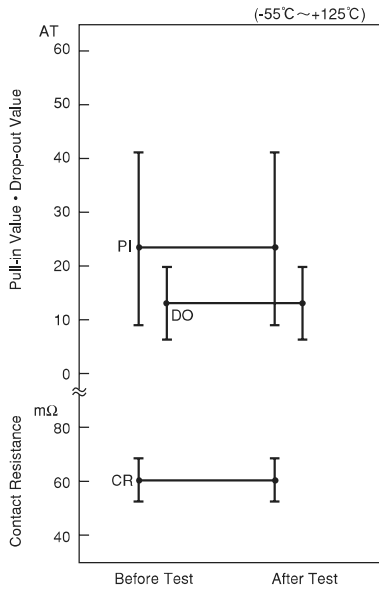
■ ENVIRONMENTAL CHARACTERISTICS

(1) Temperature Characteristics

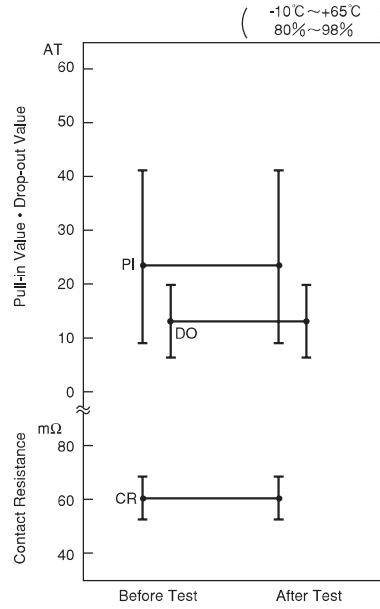


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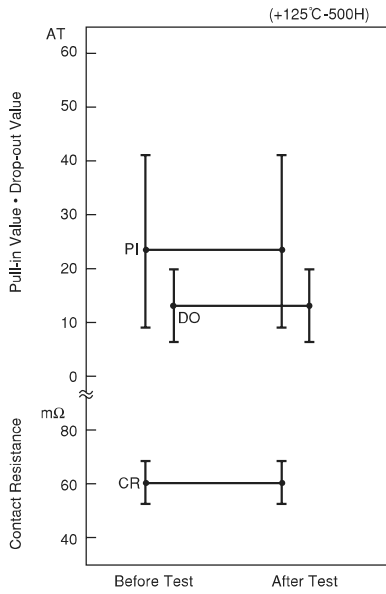
(2) Temperature Cycle



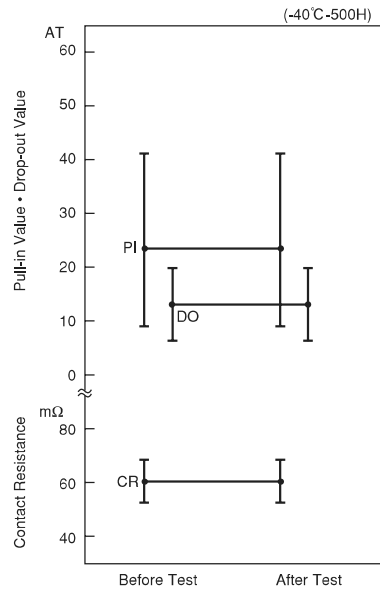
(3) Temperature and Humidity Cycle



(4) High Temperature Storage Test

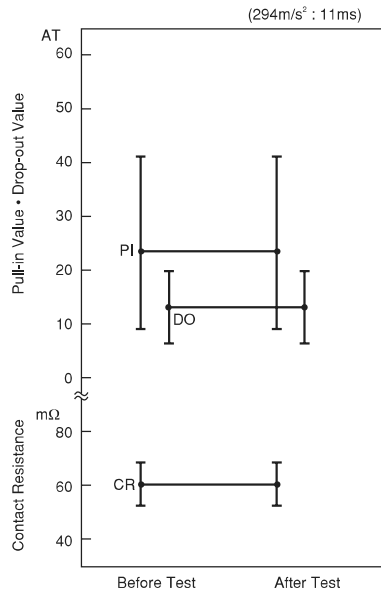


(5) Low Temperature Storage Test

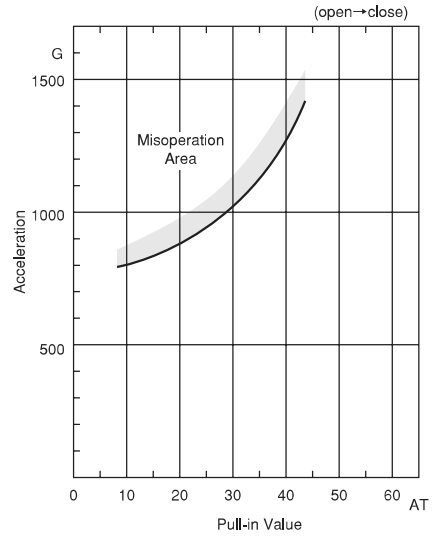


(6) Shock Test

1) Electrical Characteristics

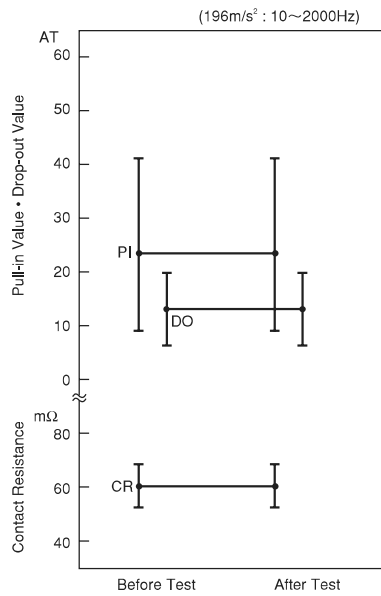


2) Misoperation Area



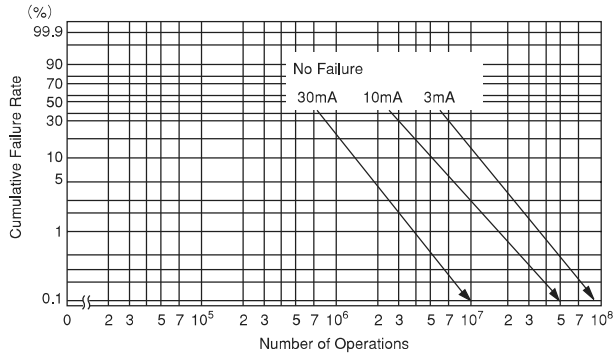
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(7) Vibration Test



■ LIFE EXPECTANCY DATA: ORD324H

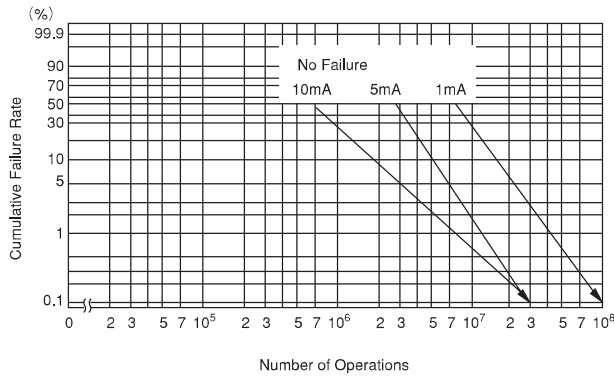
Load Conditions  
 Voltage: 3VDC  
 Current: 3mA, 10mA, 30mA  
 Load: Resistive Load



\* Arrow indicates number of operations where test was completed.

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Load Conditions  
 Voltage: 5VDC  
 Current: 1mA, 5mA, 10mA  
 Load: Resistive Load



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

