

REED SWITCH

ORD2210V

Vacuum High Power

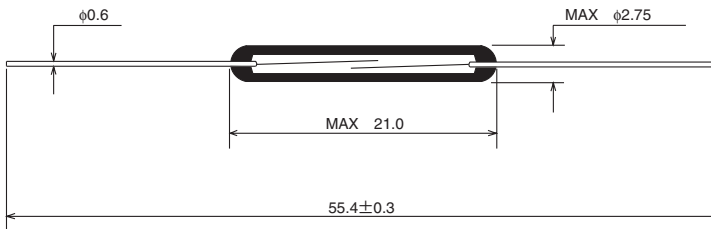
■ GENERAL DESCRIPTION

The ORD2210V is a small single-contact reed switch of a vacuum type designed for ultra high breakdown voltages 1000 V DC between the reed contacts.

■ 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

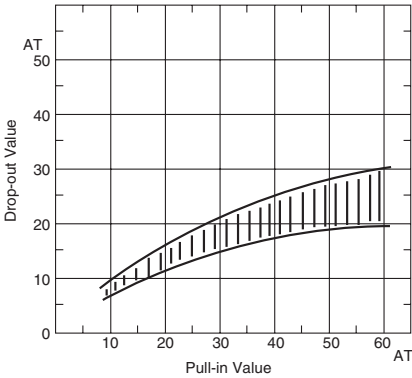
- Automotive electronic devices
- Control equipment
- Communication equipment
- Measurement equipment
- Household appliances

■ ELECTRICAL CHARACTERISTICS

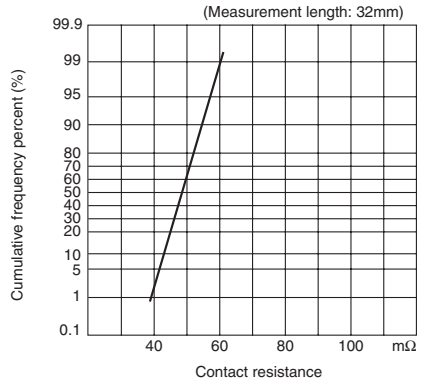
Parameter	Rated value	Unit
Pull-in Value (PI)	20~60	AT
Drop-out Value (DO)	7min	AT
Contact resistance (CR)	100	mΩ
Breakdown voltage	1000	VDC
Insulation resistance	10 ¹⁰ min	Ω
Electrostatic capacitance	0.5max	pF
	100	VA
Maximum switching voltage	350DC	V
	300AC	V
Maximum switching current	1.0	A
Maximum carry current	2.5	A

3

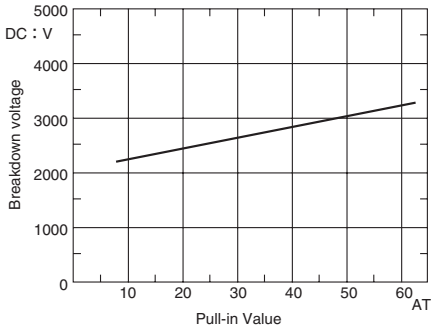
(1) Drop-out Value vs. Pull-in Value



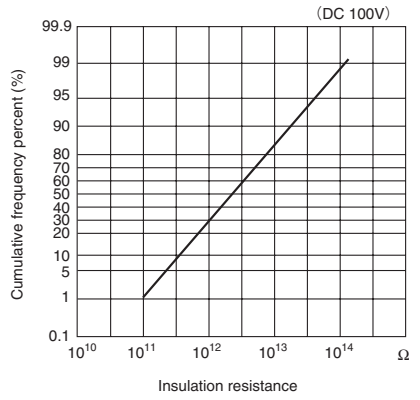
(2) Contact resistance



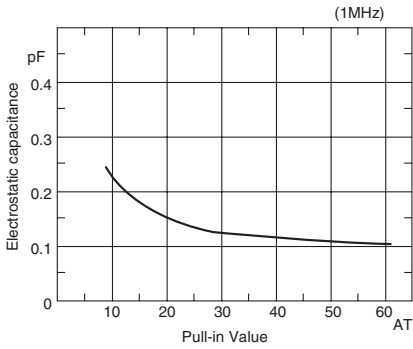
(3) Breakdown voltage



(4) Insulation resistance



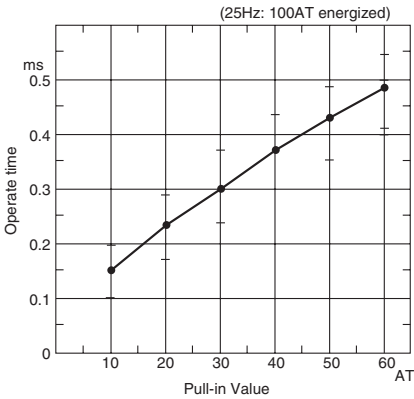
(5) Electrostatic capacitance



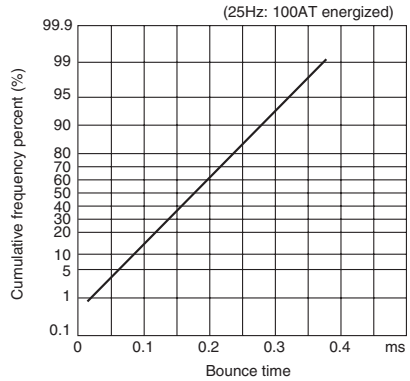
■ OPERATING CHARACTERISTICS

Parameter	Rated value	Unit
Operate time	0.6max	ms
Bounce time	0.5max	ms
Release time	0.05max	ms
Resonant frequency	2500±250	Hz
Maximum operating frequency	500	Hz

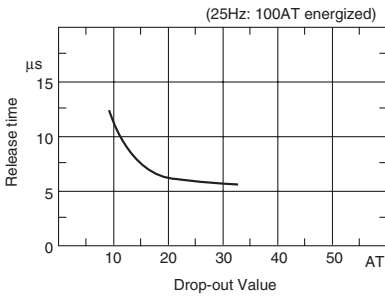
(1) Operate time



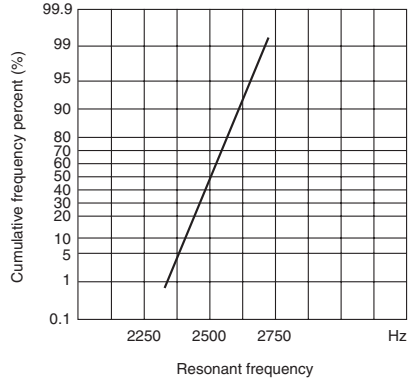
(2) Bounce time



(3) Release time



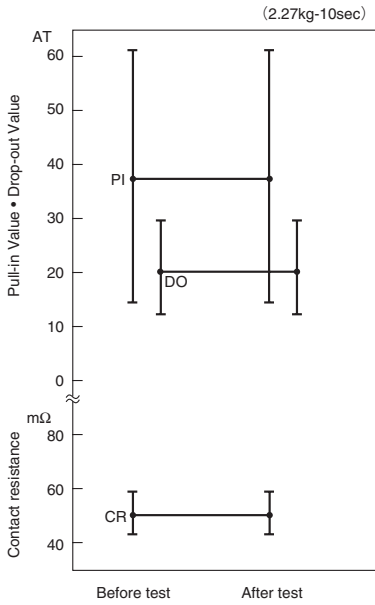
(4) Resonant frequency



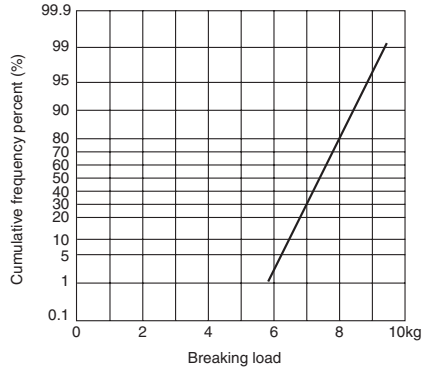
3

■ MECHANICAL CHARACTERISTICS

(1) Lead tensile test (static load)



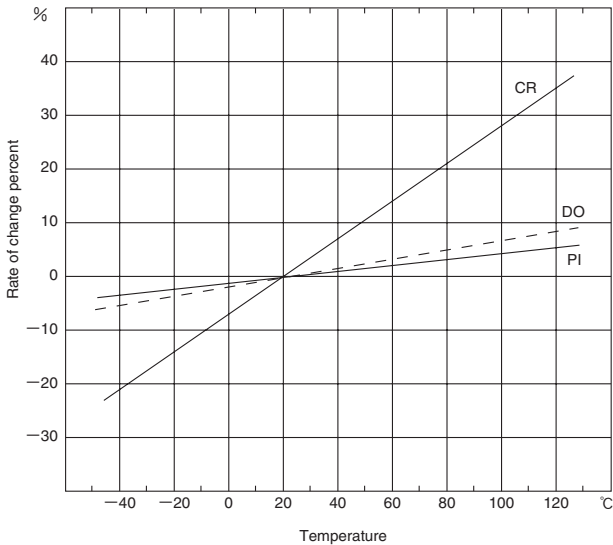
(2) Lead tensile strength



3

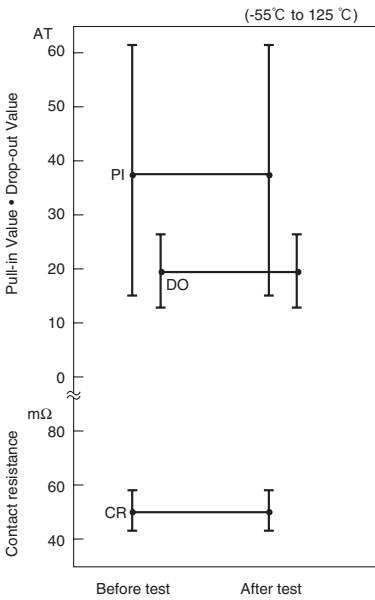
■ ENVIRONMENTAL CHARACTERISTICS

(1) Temperature characteristics

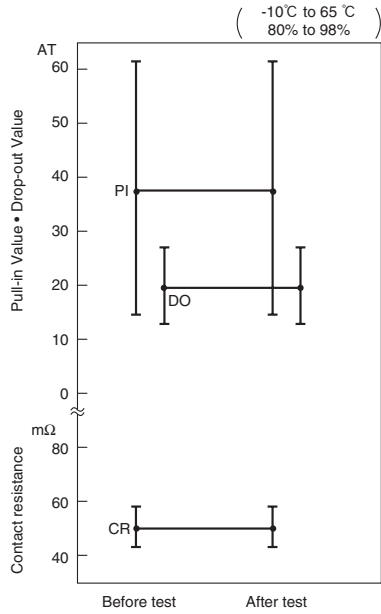


3

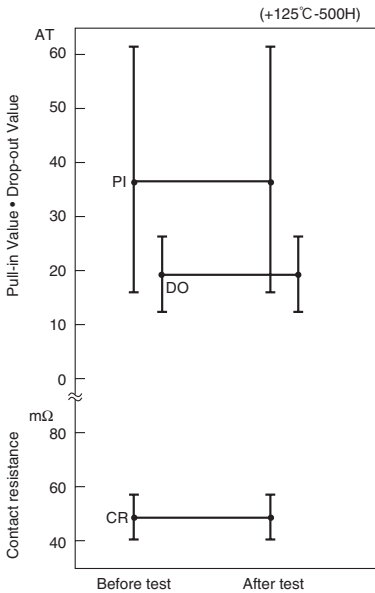
(2) Temperature cycle



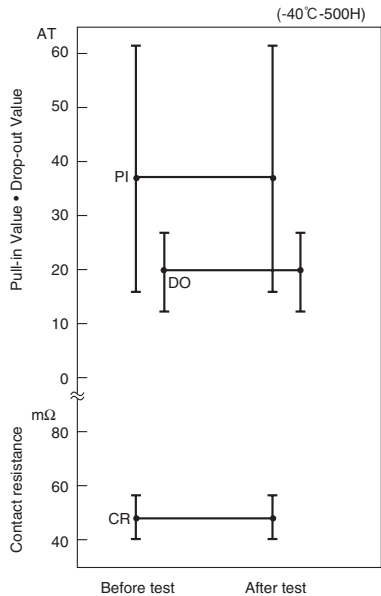
(3) Temperature and humidity cycle



(4) High temperature storage test

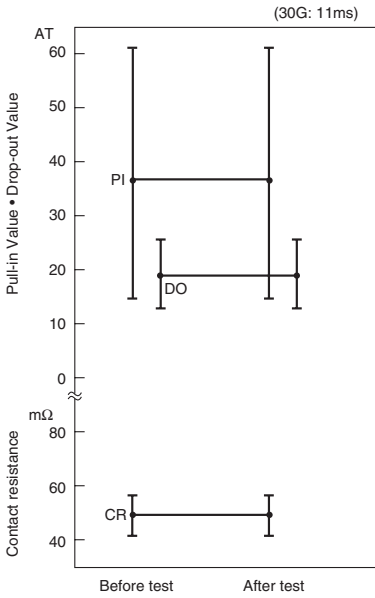


(5) Low temperature storage test

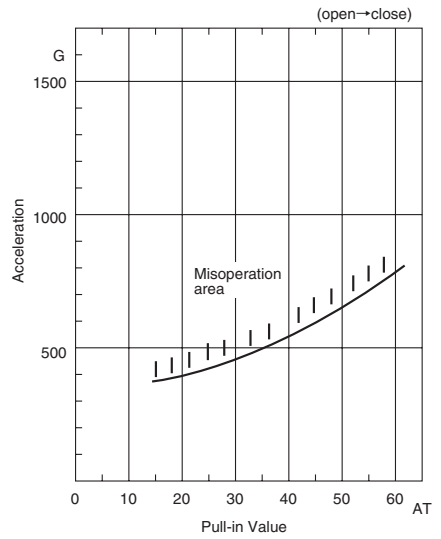


(6) Shock test

1) Electrical characteristics

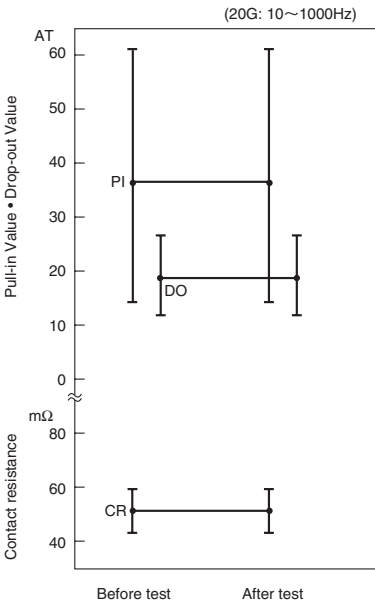


2) Misoperation area



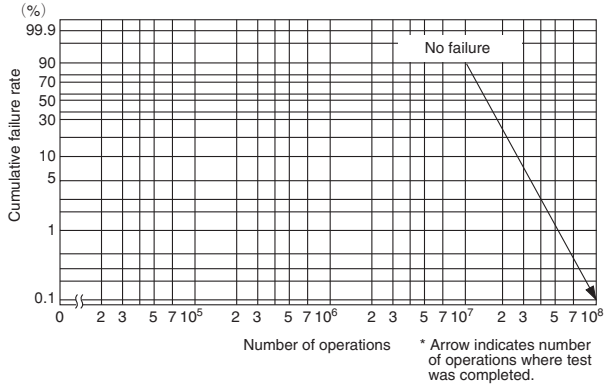
3

(7) Vibration test



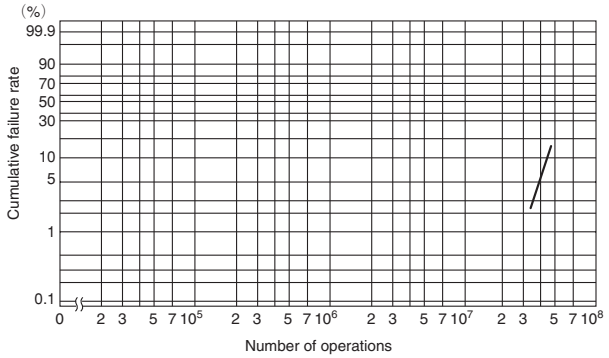
■ LIFE EXPECTANCY DATA: ORD2210V

Load conditions
 Voltage: 200VDC
 Current: 1mA
 Load: Resistive load



3

Load conditions
 Voltage: 500VDC
 Current: 1mA
 Load: Resistive load



Load conditions
 Voltage: 1kVDC
 Current: 1mA
 Load: Resistive load

