

REED SWITCH

ORD234

Long Life

■ GENERAL DESCRIPTION

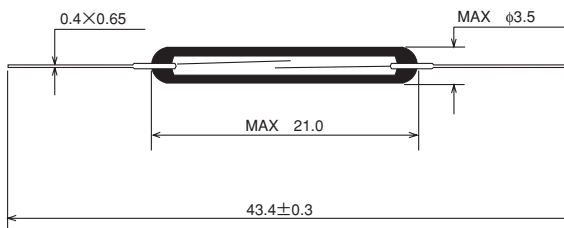
The ORD234 is a single-contact reed switch designed for long life for increased number of operations. The contacts are sealed within the glass tube with inert gas to maintain contact reliability.

■ 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.

3

■ EXTERNAL DIMENSIONS (Unit: mm)



■ APPLICATIONS

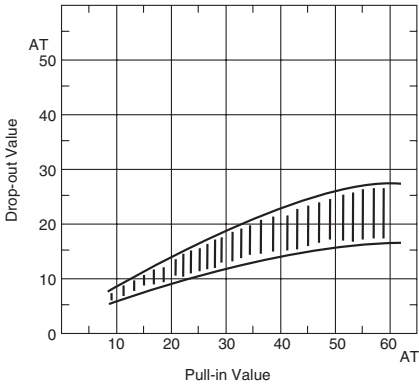
- Automotive electronic devices
- Control equipment
- Communication equipment
- Measurement equipment
- Household appliances

■ ELECTRICAL CHARACTERISTICS

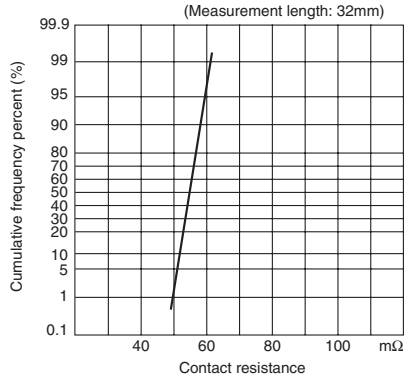
Parameter	Rated value	Unit
Pull-in Value (PI)	15~60	AT
Drop-out Value (DO)	6min	AT
Contact resistance (CR)	100max	mΩ
Breakdown voltage	250min (PI \geq 20)	VDC
	200min (PI \leq 20)	VDC
Insulation resistance	10 ¹⁰ min	Ω
Electrostatic capacitance	0.5max	pF
Contact rating	10	VA
Maximum switching voltage	200DC	V
	100AC	V
Maximum switching current	0.5	A
Maximum carry current	2.0	A

3

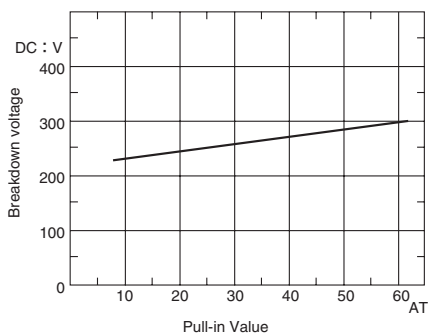
(1) Drop-out Value vs. Pull-in Value



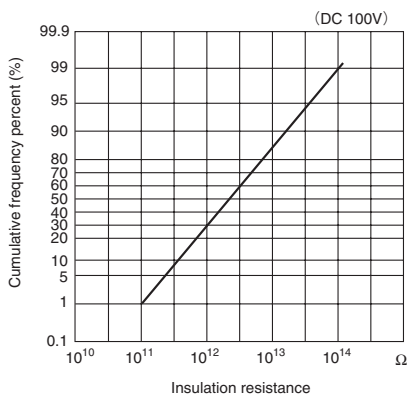
(2) Contact resistance



(3) Breakdown voltage

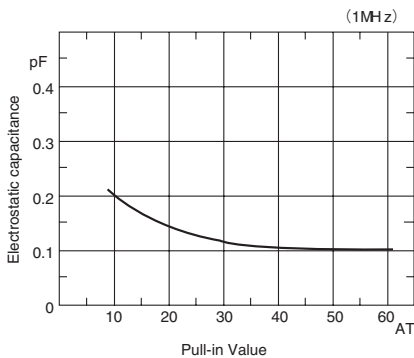


(4) Insulation resistance



3

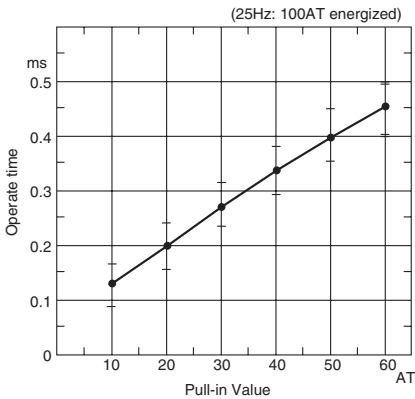
(5) Electrostatic capacitance



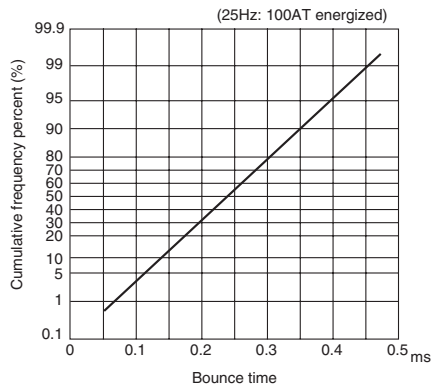
■ OPERATING CHARACTERISTICS

Parameter	Rated value	Unit
Operate time	0.5max	ms
Bounce time	0.5max	ms
Release time	0.05max	ms
Resonant frequency	2200±300	Hz
Maximum operating frequency	500	Hz

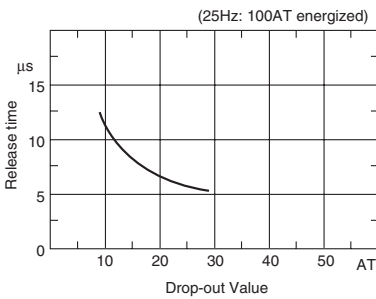
(1) Operate time



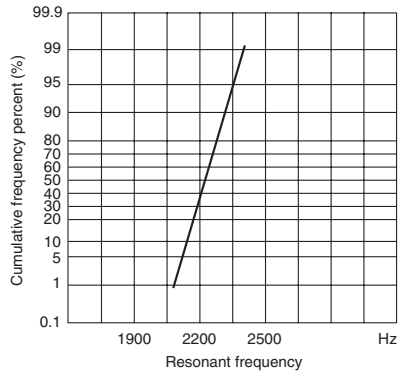
(2) Bounce time



(3) Release time

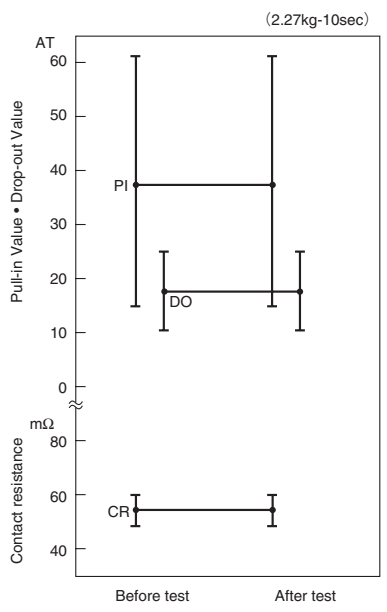


(4) Resonant frequency

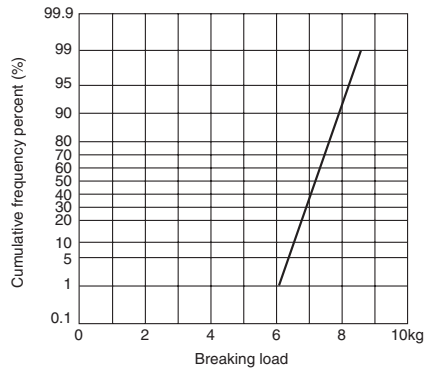


MECHANICAL CHARACTERISTICS

(1) Lead tensile test (static load)



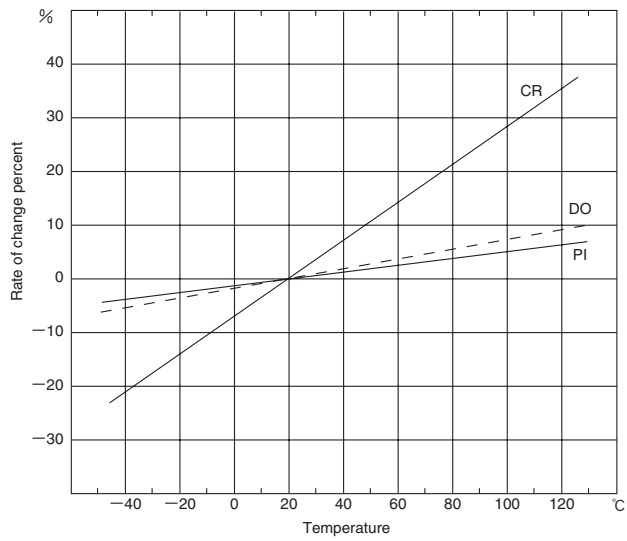
(2) Lead tensile strength



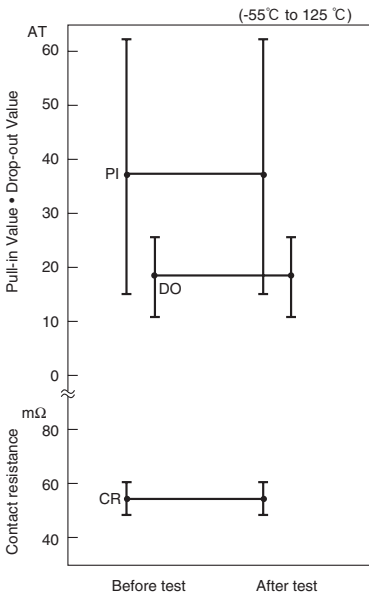
3

ENVIRONMENTAL CHARACTERISTICS

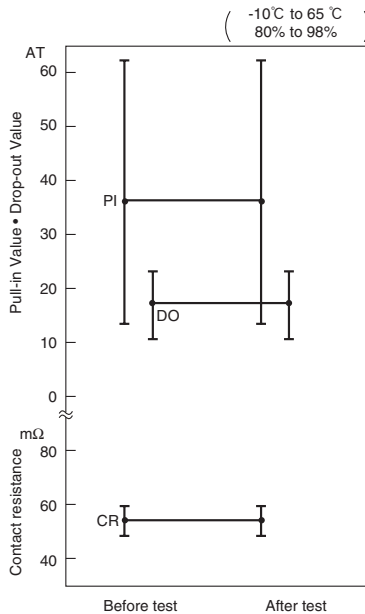
(1) Temperature characteristics



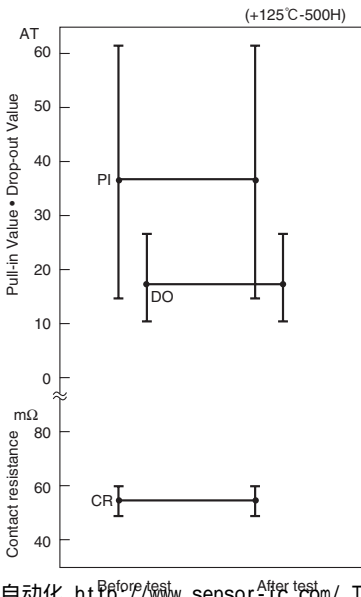
(2) Temperature cycle



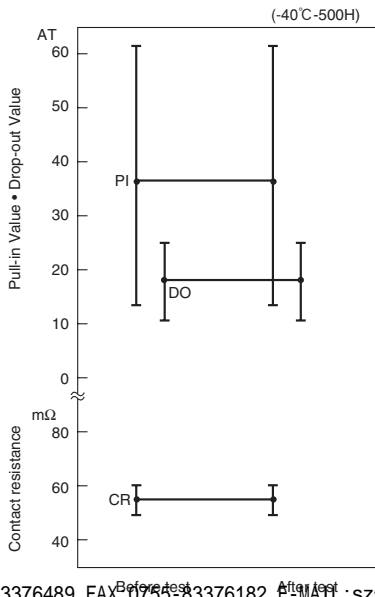
(3) Temperature and humidity cycle



(4) High temperature storage test

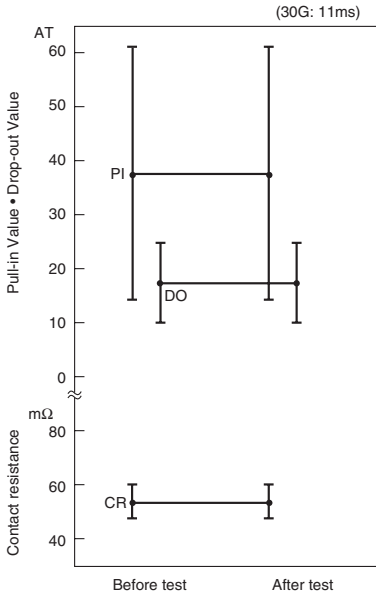


(5) Low temperature storage test

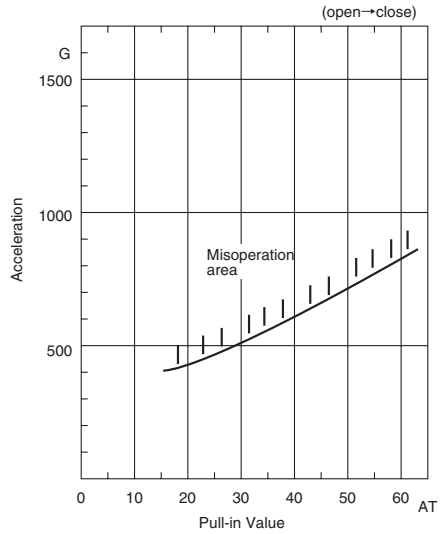


(6) Shock test

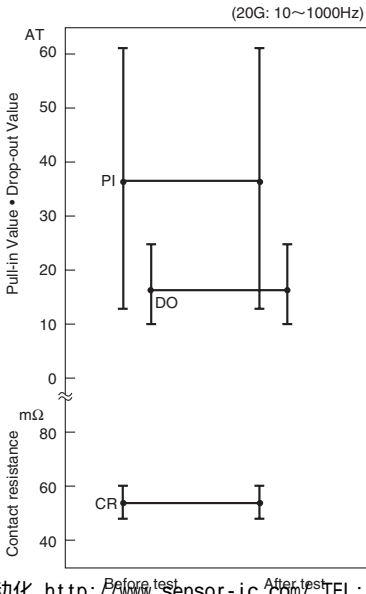
1) Electrical characteristics



2) Misoperation area



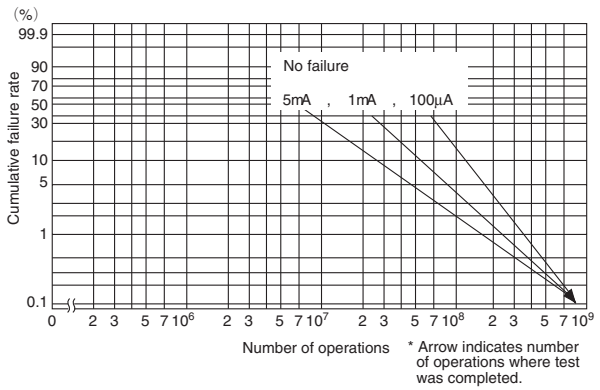
(7) Vibration test



3

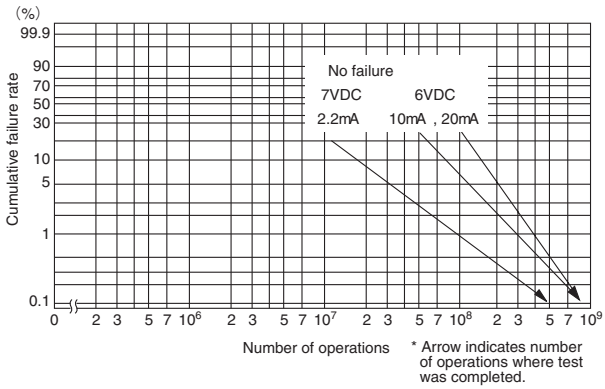
■ LIFE EXPECTANCY DATA: ORD234

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



3

Load conditions
 Voltage: 6VDC, 7VDC
 Current: 10mA, 20mA, 2.2mA
 Load: Resistive load



Load conditions
 Voltage: 12VDC, 24VDC, 48VDC
 Current: 10mA, 250mA, 400mA
 Load: Resistive load

