# REED SWITCH

## ORD228VL

## Miniature High-performance

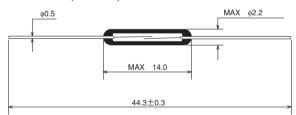
#### ■ GENERAL DESCRIPTION

The ORD228VL 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.

#### ■ FFATURES

- (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)



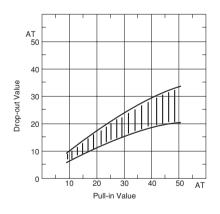
#### ■ APPLICATIONS

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

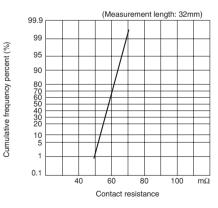
## ■ ELECTRICAL CHARACTERISTICS

Parameter	Rated value	Unit
Pull-in Value (PI)	10~50	AT
Drop-out Value (DO)	5min	AT
Contact resistance (CR)	100max	mΩ
Breakdown voltage	200 min (PI≧20)	VDC
	150 min (PI<20)	VDC
Insulation resistance	10 <sup>9</sup> min	Ω
Electrostatic capacitance	0.3max	pF
Contact rating	10	VA
Maximum switching voltage	100 (DC)	V
Maximum switching current	0.5	A
Maximum carry current	1.0	A

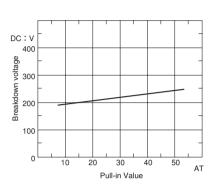
## (1) Drop-out Value vs. Pull-in Value



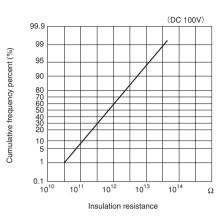
## (2) Contact resistance



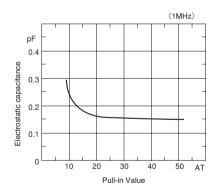
## (3) Breakdown voltage



## (4) Insulation resistance



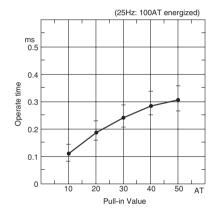
## (5) Electrostatic capacitance



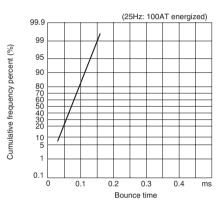
## ■ OPERATING CHARACTERISTICS

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

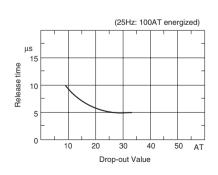
## (1) Operate time



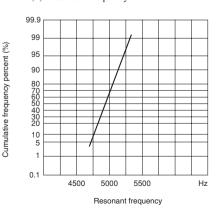
#### (2) Bounce time



#### (3) Release time

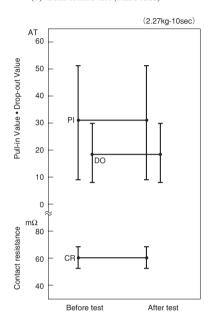


## (4) Resonant frequency

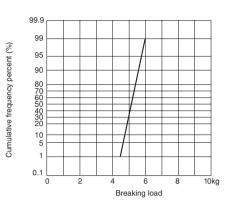


## ■ MECHANICAL CHARACTERISTICS

## (1) Lead tensile test (static load)

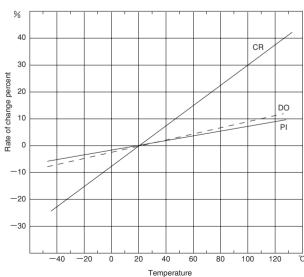


## (2) Lead tensile strength

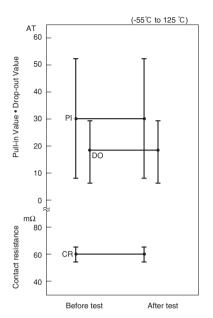


## ■ ENVIRONMENTAL CHARACTERISTICS

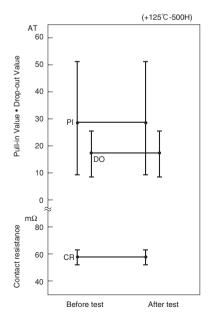
## (1) Temperature characteristics



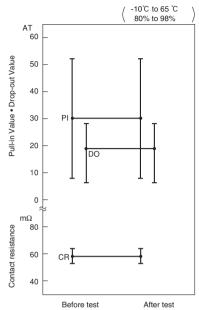
### (2) Temperature cycle



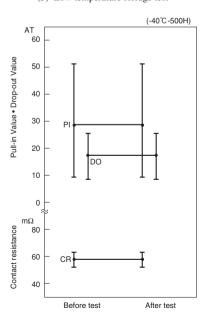
### (4) High temperature storage test



## (3) Temperature and humidity cycle

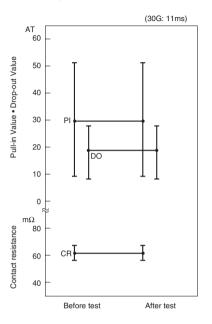


(5) Low temperature storage test

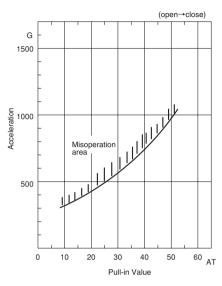


#### (6) Shock test

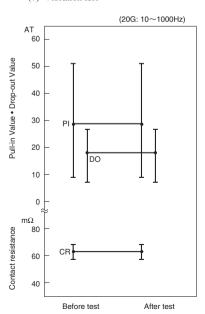
#### 1) Electrical characteristics



## 2) Misoperation area



#### (7) Vibration test



## 3

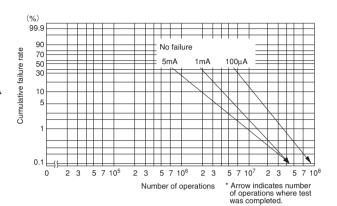
#### ■ LIFE EXPECTANCY DATA: ORD228VL

Load conditions

Voltage: 5VDC

Current:  $100\mu A$ , 1mA, 5mA

Load: Resistive load

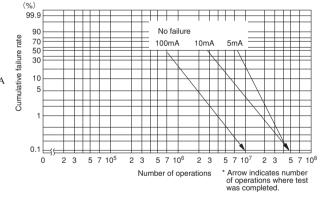


Load conditions

Voltage: 12VDC

Current: 5mA, 10mA, 100mA

Load: Resistive load

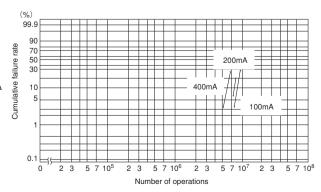


Load conditions

Voltage: 24VDC

Current: 100mA, 200mA, 400mA

Load: Resistive load



# **Mouser Electronics**

**Authorized Distributor** 

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

## Standex Electronics:

ORD228S-1-1015 ORD228VL/15-20 AT ORD228VL/20-30 AT ORD228VL/20-30 AT ORD228VL/10-15 AT ORD228S-1T-10-15 AT ORD 228VL/25-27 AT ORD-228-20/25AT ORD 228VL/20-25 AT