

ORD221 REED SWITCH

Miniature offset-type

- The ORD221 is a small single-contact reed switch designed for general control of medium level loads less than 100V. The contacts are sealed within the glass tube with inert gas to maintain contact reliability.



ORD221 Miniature offset-type

Applications

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

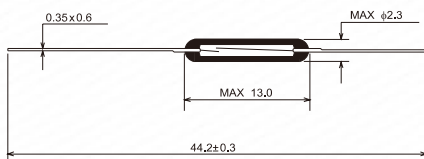
FEATURES

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

ELECTRICAL CHARACTERISTICS

Parameter	Rated Value	Unit
Pull-in Value (PI)	10 to 30	AT
Drop-out Value (DO) (min.)	5	AT
Contact Resistance (CR) (max.)	100	mOhm
Breakdown Voltage (min.)	200 (PI ≥ 20)	VDC
	150 (10 ≤ PI < 20)	VDC
Insulation Resistance (min.)	10 ⁹	Ohm
Electrostatic Capacitance (max.)	0.3	pF
Contact Rating	10	VA
Maximum Switching Voltage (max.)	100DC/100AC	V
Maximum Switching Current (max.)	0.3	A
Maximum Carry Current (max.)	1.0	A

EXTERNAL DIMENSIONS (Unit: mm)



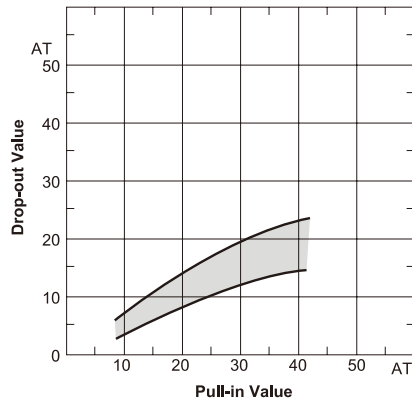
OPERATING CHARACTERISTICS

Parameter	Rated Value	Unit
Operate Time (max.)	0.4	ms
Bounce Time (max.)	0.5	ms
Release Time (max.)	0.05	ms
Resonant Frequency	2750 ± 250	Hz
Operating Frequency (max.)	500	Hz

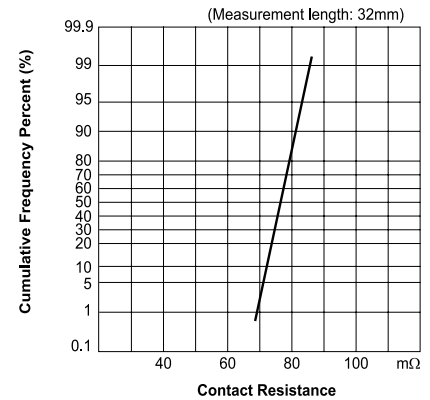
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ELECTRICAL CHARACTERISTICS

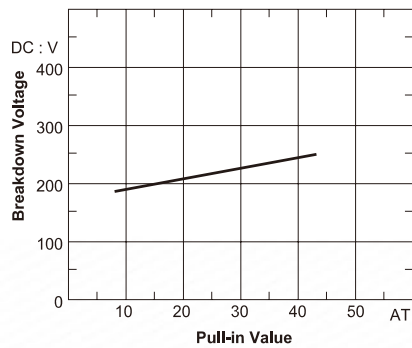
Pull-in Value vs. Drop-out Value



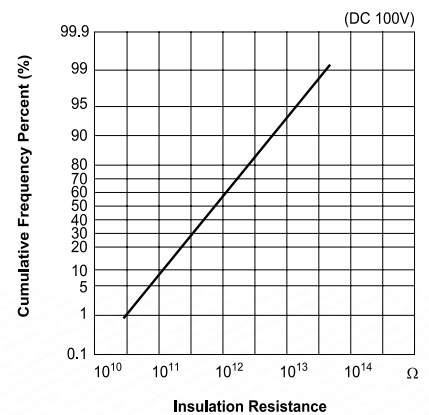
Contact Resistance



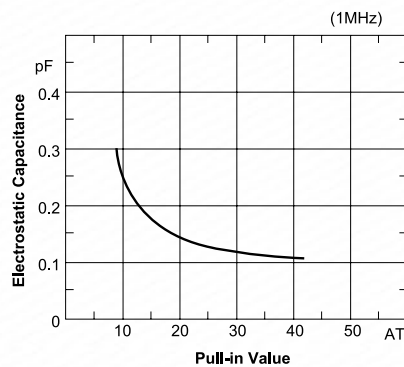
Breakdown Voltage



Insulation Resistance



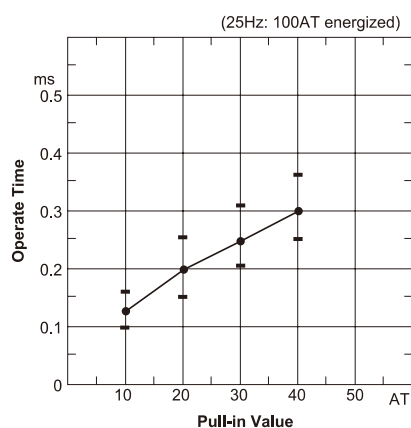
Electrostatic Capacitance



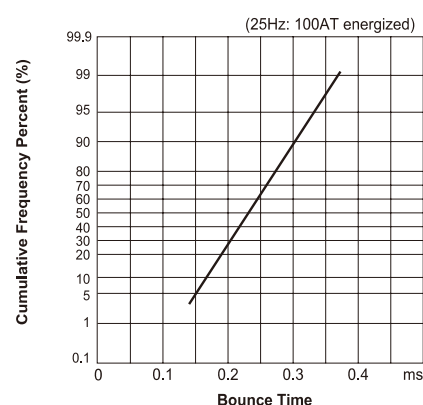
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OPERATING CHARACTERISTICS

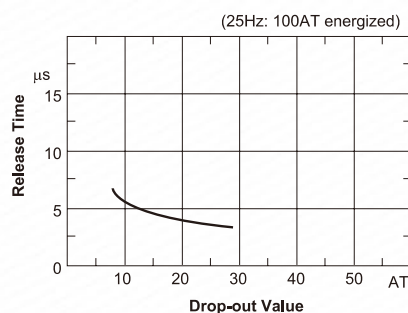
Operate Time



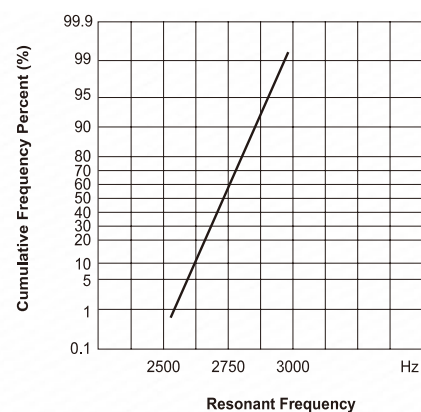
Bounce Time



Release Time



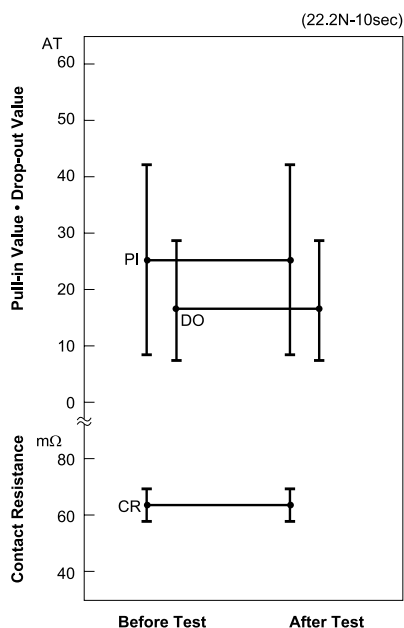
Resonant Frequency



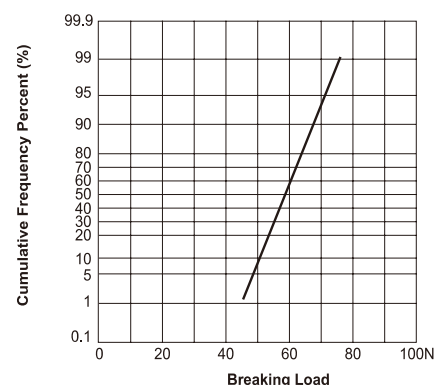
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MECHANICAL CHARACTERISTICS

Lead Tensile Test (Static Load)



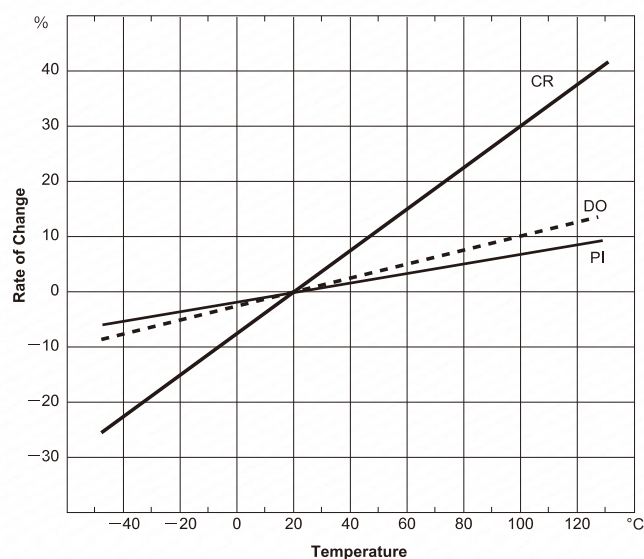
Lead Tensile Strength



ENVIRONMENTAL CHARACTERISTICS

Parameter	Rated Value	Unit
Temperature range	-40~+125	°C
Shock (11ms)	294(30G)	m/s ²
Vibration (10~2000Hz)	196(20G)	m/s ²
Lead tensile strength	19.6(2.0kgf)	N

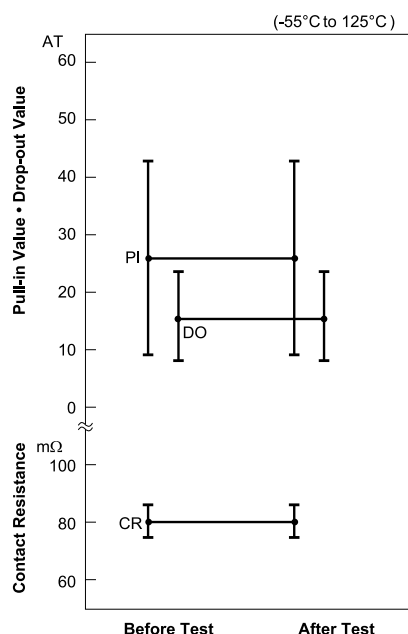
Temperature Characteristics



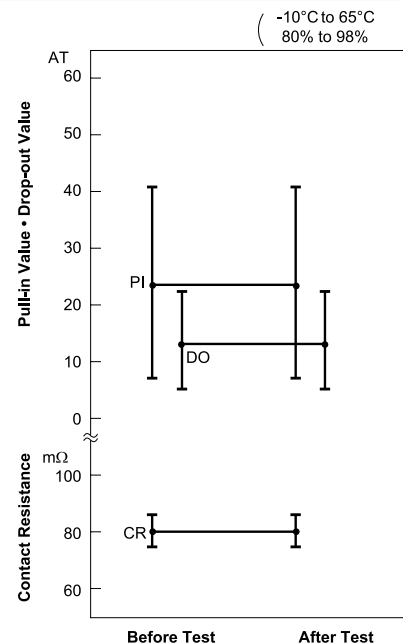
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ENVIRONMENTAL CHARACTERISTICS

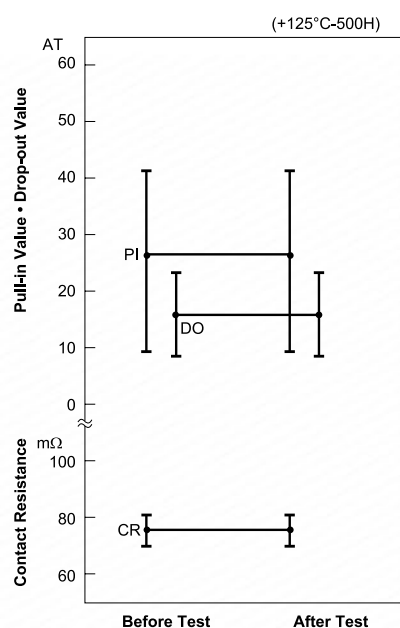
Temperature Cycle



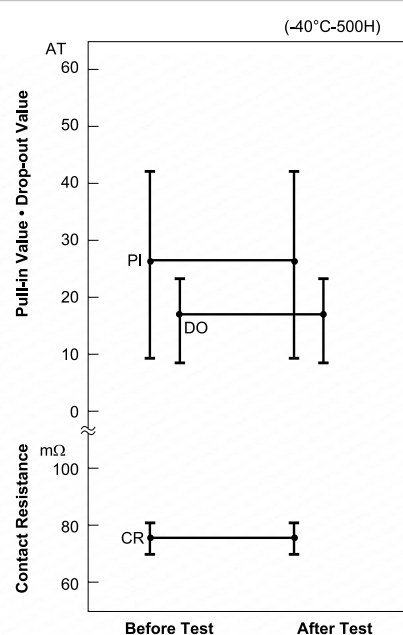
Temperature and Humidity Cycle



High Temperature Storage Test



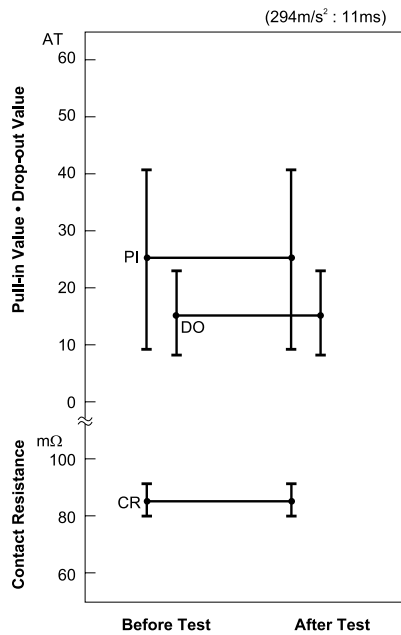
Low Temperature Storage Test



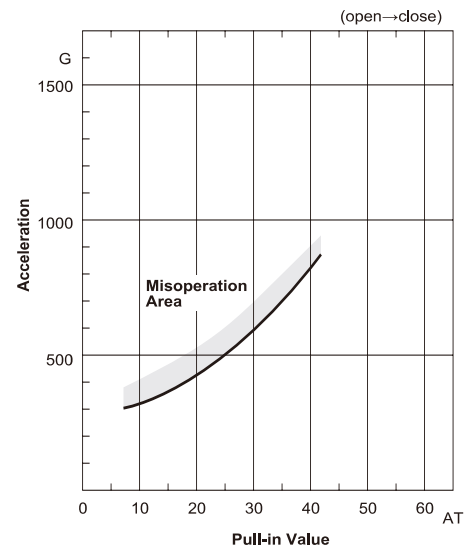
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ENVIRONMENTAL CHARACTERISTICS

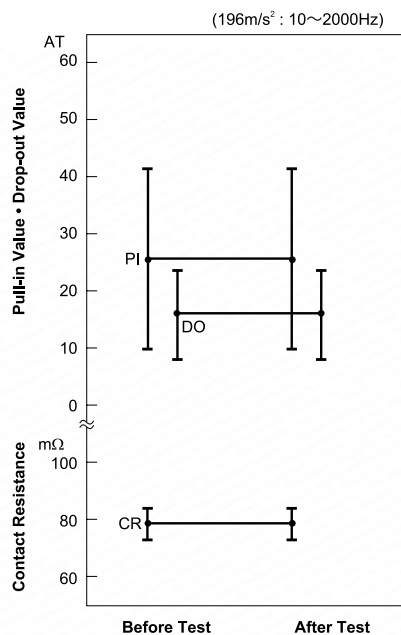
Shock Test (Electrical Characteristics)



Shock Test (Misoperation Area)



Vibration Test



Please note: All technical specifications on this datasheet refer to the standard product range. Modifications in the sense of technical progress are reserved. For general information only. For more specific information, please consult the product datasheet, available upon request.

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