



OMR series

Dry Reed Relay

Telecommunications, Office Machines.

A) UL File No. E82292

Features

• Low cost, small package dry reed relay.

• 1 Form A contact and 2 Form A arrangements.

Contact Data @ 20°C

Arrangements: 1 Form A (SPST-NO), 2 Form A (DPST-NO).

Material: Rh, Ru.

Max. Switching Rate: 300 ops./min. (no load). 30 ops./min. (rated load).

Expected Mechanical Life: 100 million operations (no load). **Expected Electrical Life:** 1,000,000 operations (rated load).

Minimum Load: 1mA @ 1VDC.

Initial Contact Resistance: 150 milliohms @ 100mA, 6VDC.

Contact Ratings

Ratings:

 $100\mu A$ @ 5VDC, 100,000,000 operations. 1mA @ 5VDC, 50,000,000 operations. 5mA @ 5VDC, 50,000,000 operations.

5mA @ 12VDC, 50,000,000 operations. 10mA @ 12VDC, 50,000,000 operations. 100mA @ 12VDC, 10,000,000 operations.

100mA @ 24VDC, 7,000,000 operations. 200mA @ 24VDC, 7,000,000 operations. 400mA @ 24VDC, 5,000,000 operations.

Max. Switched Voltage: AC: 120V. DC: 60V.

Max. Switched Current: 1A (OMR-F), 0.5A (OMR-H). Max. Switched Power: OMR-F: 50VA, 50W.

OMR-H: 10VA, 10W.

Initial Dielectric Strength

Between Open Contacts: 200VDC. (1 second). Between Coil and Contacts: 3,000VDC. (1 second).

Surge Voltage Between Coil and Contacts: 3,000V (10 / 160µs).

Coil Data

Voltage: 3 to 24VDC.

Nominal Power: 100 mW to 280mW.

Coil Temperature Rise: 30°C max., at rated coil voltage.

Max. Coil Power: 160% of nominal.

Duty Cycle: Continuous.

Coil Data @ 20°C

OMR								
Rated Coil Voltage (VDC)	Nominal Current (mA)	Coil Resistance (ohms) ± 10%	Must Operate Voltage (VDC)	Must Release Voltage (VDC)				
3	47.6	63	2.10	0.30				
5/6	24.0	250	3.50	0.50				
9	12.9	700	6.30	0.90				
12	11.4	1,050	8.40	1.20				
24	11.5	2,080	16.80	2.40				

Operate Data

Must Operate Voltage: 70% of nominal voltage or less. **Must Release Voltage:** 10% of nominal voltage or more.

Operate Time: 1.0 ms max. **Release Time:** 0.5 ms max.

Environmental Data

Temperature Range:

Operating: -30°C to +70°C

Vibration, Mechanical: 10 to 55 Hz., 1.5mm double amplitude **Operational:** 10 to 55 Hz., 1.5mm double amplitude.

Shock, Mechanical: 1,000m/s² (100G approximately).

Operational: 100m/s² (10G approximately).

Operating Humidity: 20 to 85% RH. (Non-condensing)

Initial Insulation Resistance

Between Mutually Insulated Elements: 1,000M ohms min. @ 100VDCM.

Mechanical Data

Termination: Printed circuit terminals.
Enclosure (94V-0 Flammability Ratings):
OMR: Open, no cover.

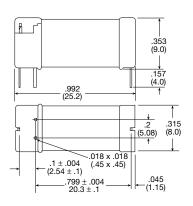
OMR-C: Snap-on dust cover. **Weight:** 0.16 oz (4.5g) approximately.

Ordering Information

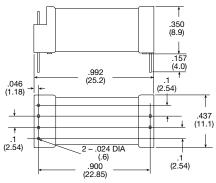
Typical Part Number ▶		OMR	-C	-1	12	Н
1. Basic Series: OMR = Dry Reed Relay.						
2. Enclosure: Blank = Open, no cover. C = Snap-on dust cover.			•			
3. Termination: 1 = 1 pole	2 = 2 pole					
4. Coil Voltage: 03 = 3VDC 06 = 6VDC	09 = 9VDC 12 = 12VDC	24 = 24VDC				
5. Contact Rating: H = 0.5A @ 120VAC	F = 1A @ 120VAC					

Outline Dimensions

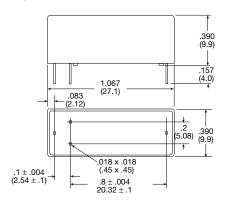
Open Type, 1 Form A



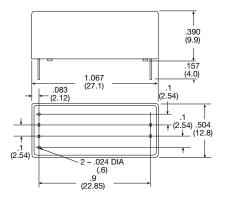
Open Type, 2 Form A



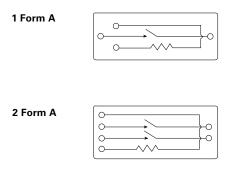
Snap-on Dust Cover Type, 1 Form A



Snap-on Dust Cover type, 2 Form A



Wiring Diagrams (Bottom View)



PC Board Layout (Bottom View)

