

OMR series

Dry Reed Relay

Telecommunications, Office Machines.

File No. E82292

Users should thoroughly review the technical data before selecting a product part number. It is recommended that user also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

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:

100µA @ 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: 0.5A.

Max. Switched Power: 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).

Initial Insulation Resistance

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

Coil Data

Voltage: 6 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)
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)

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 H ,000

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:
06 = 6VDC 12 = 12VDC
09 = 9VDC 24 = 24VDC

5. Contact Rating:
H = 0.5A @ 120VAC

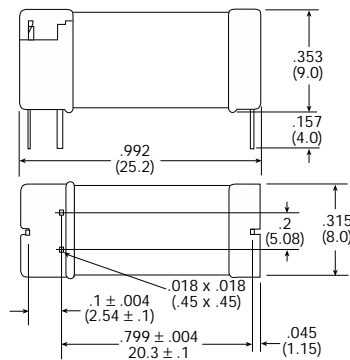
6. Suffix:
,000 = Standard model Other Suffix = Custom model

Our authorized distributors are more likely to stock the following items for immediate delivery.

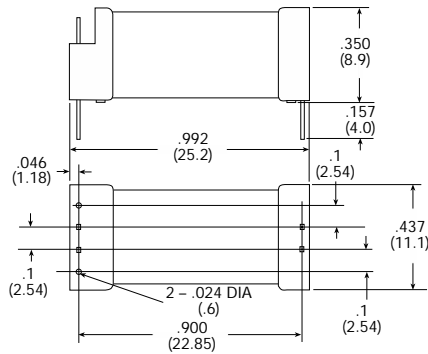
None at present.

Outline Dimensions

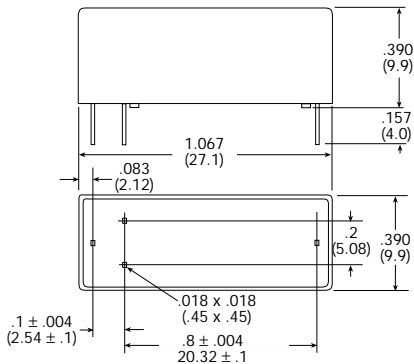
Open Type, 1 Form A



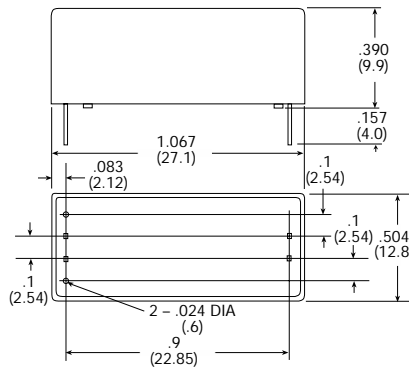
Open Type, 2 Form A



Snap-on Dust Cover Type, 1 Form A

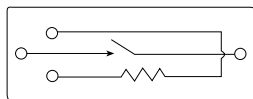


Snap-on Dust Cover type, 2 Form A

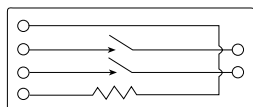


Wiring Diagrams (Bottom View)

1 Form A

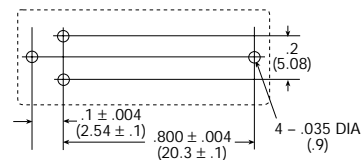


2 Form A

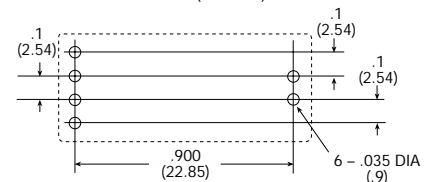


PC Board Layout (Bottom View)

1 Form A



2 Form A



Dimensions are shown for reference purposes only

Dimensions are in inches over (millimeters) unless otherwise specified.

Specifications and availability subject to change.

www.tycoelectronics.com
Technical support:
Refer to inside back cover.