

MD1 SERIES

ORDER CODE

MD1-5-B

C: 1a
B: 1b

COIL VOLTAGE

3: DC 3V
5: DC 5V
12: DC 12V
24: DC 24V

TYPE



Main Features:

- DIP Reed Relay.
- Completely washable.
- Surge strength 1,500 VDC (between coil & contact).
- Provide high speed, miniature and cost effective switching solution.

COIL RATING (at 20°C)

| Nominal Voltage (VDC) | Coil resistance (Ω) (+-10%) | Power Consumpt -10 N (W) | Nominal Current (mA)(+-10%) | Pull In Voltage (VDC) | Drop Out Voltage (VDC) | Max. Allowable Voltage (VDC) |
|-----------------------|--------------------------------------|--------------------------|-----------------------------|-----------------------|------------------------|------------------------------|
| 3V | 250 Ω | 0.015W | 5.0mA | 2.25V | 0.5V | 5V |
| 5V | 500 Ω | 0.05W | 10.0mA | 3.75V | 1.0V | 10V |
| 12V | 1000 Ω | 0.144W | 12.0mA | 9.00V | 1.2V | 20V |
| 24V | 2000 Ω | 0.266W | 11.1mA | 18.00V | 2.4V | 28V |

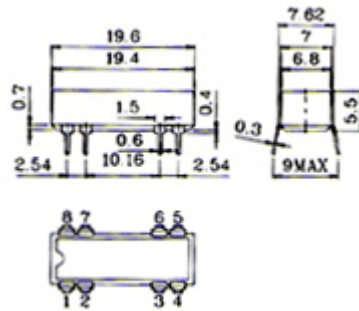
PERFORMANCE (at initial value)

| Item \ Type | 0.5A |
|--|---|
| Contact Resistance | 150m Ω Max (initial value) |
| Operate Time | 0.5m sec Max. |
| Release Time | 0.2m sec Max. |
| Dielectric Strength between coil & contact between contact | DC 1500V (1min.) DC 250V (1min.) |
| Insulation Resistance | 100M Ω Min. (DC100V) |
| Operating Ambient Temperature | -40°C ~ +85°C |
| Humidity | Max. 85% RH |
| Vibration Resistance | 10G (10~2000Hz) |
| Shock Resistance | 10G |
| Life Expectancy Mechanically Electrically | 100.000,000 ops . Min. (1800 ops./h) 100,000 ops. Min. (0.5A 20VDC, 0.1A 100VDC, 0.5A 20VAC, 0.1A 100VAC, resistive load 1200 ops./h) 50.000,000 ops . Min (5VDC, 10mA, resistive load 1200 ops/h) |
| Weight | 2g (about) |

CONTACT RATING

| Item \ Type | 0.5A |
|--------------------------|--|
| Rated Carrying Current | DC 20V 0.5A AC 20V 0.5A DC 100V 0.1A AC 100V 0.1A |
| Max. Allowable Current | 1A |
| Max. Allowable Voltage | DC 100V AC 100V |
| Max. Current (continual) | 0.5A |
| Max. Switching Power | 10W, 10VA |
| Max. Switching Voltage | DC 200V |
| Max. Switching Current | 0.5A |
| Contact Material | Ruthenium |

DIMENSIONS (Unit: mm)



WIRING DIAGRAMS (Bottom View)

