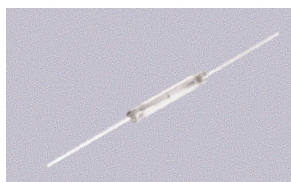


MARR-5 Features and Benefits



Features

- Miniature normally open switch with 19.69mm x 2.66mm (0.775" x 0.105") glass envelope
- Capable of switching 1000Vdc at up to 1mA
- Minimum voltage breakdown 2000Vdc
- 10^{12} Ohms insulation resistance
- Available sensitivity range 17-38 AT

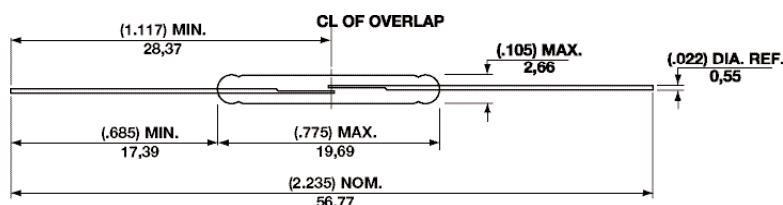
Benefits

- Hermetically sealed switch contacts are not effected by and have no effect on their external environment
- Low, stable contact resistance
- Zero operating power required for contact closure
- Fit and forget durability

Applications

- Reed relays (particularly suitable for high voltage breakdown applications)
- Security
- Limit switching
- Telecoms line switching
- Office equipment
- Automotive applications

DIMENSIONS (in) mm



| Switch Type | MARR-5 |
|--|--------|
| Contact Form | A |
| Underwriters Laboratories Recognised, File E47258 (see note 1) | UL |

ELECTRICAL RATINGS

| | | | |
|--------------------|------------------|--------------------|-------------|
| Contact Rating (2) | | Watt - max. | 10 |
| Voltage | Switching (6) | Vdc - max. | 1000 |
| | Breakdown | Vdc - min. | 2000 |
| Current | Switching | A - max. | 0.5 |
| | Carry | A - max. | 1.3 |
| Resistance | Contact, Initial | Ω - max. | 0.100 |
| | Insulation | Ω - min. | 10^{12} |
| Capacitance | Contact | pF - typ. | 0.2 |
| Temperature | Operating | $^{\circ}\text{C}$ | -75 to +125 |
| | Storage (7) | $^{\circ}\text{C}$ | -75 to +125 |

OPERATING CHARACTERISTICS

| | | | |
|--------------------|------------------------------|-----------|------|
| Operate Time (3) | | ms - max. | 0.75 |
| Release Time (3) | | ms - max. | 0.3 |
| Shock | 1 ms $\frac{1}{2}$ sine wave | G - max. | 100 |
| Vibration | 50-2000 Hertz | G - max. | 30 |
| Resonant Frequency | | Hz - typ. | 3200 |

MAGNETIC CHARACTERISTICS

| | | | |
|------------------------|--|--------------|-------|
| Pull-In Range (4) | | Ampere Turns | 17-38 |
| Rating Sensitivity (5) | | Ampere Turns | 35 |
| Test Coil | | | L4989 |

- Notes
- 1) For details on electrical specifications, contact Hamlin.
 - 2) Contact rating-Product of the switching voltage and current should never exceed the wattage rating. Contact Hamlin for additional load/life information.
 - 3) Operate (inc. bounce) /Release Time-per EIA/NARM RS421A, diode suppressed coil.

- 4) Pull in Range-Contact Hamlin for tolerances available within this range.
- 5) Rating Sensitivity-The value at which contact ratings and operating characteristics are determined. Derating may be required below this value.
- 6) MARR-5 Switching current is limited to 1ma at 1000Vdc. Higher voltages and currents can be switched using correct suppression circuitry (consult Hamlin).
- 7) Storage Temperature-Long time exposure at elevated temperature may degrade solderability of the leads.

Hamlin USA Tel: +1 920 648 3000 • Fax: +1 920 648 3001 • Email: sales.us@hamlin.com
Hamlin UK Tel: +44 (0)1379 649700 • Fax: +44 (0)1379 649702 • Email: sales.uk@hamlin.com
Hamlin Germany Tel: +49 (0) 6142 923920 • Fax: +49 (0) 6142 923921 • Email: sales.de@hamlin.com
Hamectrol France Tel: +33 (0) 1 6047 3000 • Fax: +33 (0) 1 6015 9136 • Email: sales.fr@hamlin.com

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