

20×10×11

M1BS



Features

- DIL Pitch Terminals .High Sensitivity.
- Conforms to FCC Part 68 1.5kV Surge and Dielectric 1000VAC.
- Fully sealed (immersion cleaning).
- High Reliability bifurcated Contact.
- Application for Telecommunication Equipment,Office Equipment,Security Alarm Systems,Measuring instruments, Medical Monitoring Equipment,Audio Visual Equipment, Flight Simulator,Sensor Control.

Ordering Information

M1BS 12 H A W

1 2 3 4 5

1 Part number: M1BS
 2 Coil rated Voltage: DC:3:3V; 5:5V; 6:6V; 9:9V;
 12:12V; 24:24V; 48:48V

3 Enclosure: H: Sealed Type
 4 Nominal coil power: Nil:0.55W; A:0.4W
 5 Contact material: W: AgNi

Contact Data

| | | | |
|------------------------------------|------------|-----------------------|-------------------------------------------------|
| Contact Arrangement | | 2C (DPDT(B-M)) | |
| Contact Material | | AgNi(Gold clad) | |
| Contact Rating (resistive) | | 2A/30VDC; 0.6A/125VAC | |
| Max. Switching Power | | 60W 125VA | Min. Switching load: 1mA/10mV (Reference Value) |
| Max. Switching Voltage | | 220VDC 250VAC | Max. Switching Current:2A |
| Contact Resistance or Voltage drop | | ≤50mΩ | Item 4.12 of IEC 61810-7 |
| Operational Life | Electrical | 1 × 10 ⁵ | Item 4.30 of IEC 61810-7 |
| | Mechanical | 10 ⁸ | Item 4.31 of IEC 61810-7 |

CAUTION:

Relays previously tested or used above 10mA resistive at 6V maximum (DC or peak AC) open circuit are not recommended for subsequent use in low level applications.

Coil Parameter

| Dash numbers | Coil voltage VDC | | Coil resistance Ω ±10% | Pick up voltage VDC(max) (70% of rated voltage) | Release voltage VDC(min) (10% of rated voltage) | Coil power W | Operate Time ms | Release Time ms |
|--------------|------------------|------|------------------------|--------------------------------------------------|-------------------------------------------------|--------------|-----------------|-----------------|
| | Rated | Max | | | | | | |
| M1BS-003 | 3 | 4.2 | 16 | 2.1 | 0.3 | 0.56 | Approx. 4.5 | Approx. 1.5 |
| M1BS-005 | 5 | 7.0 | 45 | 3.5 | 0.5 | 0.56 | | |
| M1BS-006 | 6 | 8.4 | 66 | 4.2 | 0.6 | 0.55 | | |
| M1BS-009 | 9 | 12.3 | 140 | 6.3 | 0.9 | 0.58 | | |
| M1BS-012 | 12 | 17.4 | 280 | 8.4 | 1.2 | 0.52 | | |
| M1BS-024 | 24 | 34.0 | 1070 | 16.8 | 2.4 | 0.54 | | |
| M1BS-048 | 48 | 64.9 | 3900 | 33.6 | 4.8 | 0.59 | | |
| M1BS-003A | 3 | 4.9 | 22.5 | 2.1 | 0.3 | 0.4 | Approx. 4.5 | Approx. 1.5 |
| M1BS-005A | 5 | 8.1 | 62.5 | 3.5 | 0.5 | 0.4 | | |
| M1BS-006A | 6 | 9.7 | 90 | 4.2 | 0.6 | 0.4 | | |
| M1BS-009A | 9 | 14.5 | 203 | 6.3 | 0.9 | 0.4 | | |
| M1BS-012A | 12 | 19.4 | 360 | 8.4 | 1.2 | 0.4 | | |
| M1BS-024A | 24 | 38.9 | 1440 | 16.8 | 2.4 | 0.4 | | |
| M1BS-048A | 48 | 77.8 | 5760 | 33.6 | 4.8 | 0.4 | | |

- CAUTION:**
- 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.
 - 2.Pickup and release voltage are for test purposes only and are not to be used as design criteria.

Characteristics

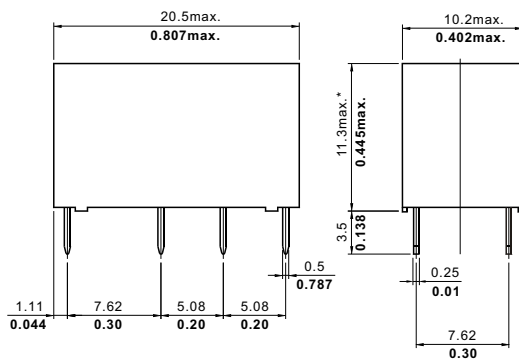
| | | |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------|
| Electrostatic capacitance | | |
| Between open Contacts | Approx.0.7pF | Item 4.41 of IEC 61810-7 |
| Between coil & Contacts | Approx.1.0pF | Item 4.41 of IEC 61810-7 |
| Between Contact Poles | Approx.0.9pF | Item 4.41 of IEC 61810-7 |
| Insulation Resistance | 1000M Ω min (at 500VDC) | Item 7 of IEC 60255-5 |
| Dielectric Strength | | |
| Between open Contacts | 1000VAC 1min | Item 6 of IEC 60255-5 |
| Between coil & Contacts | 1000VAC 1min | Item 6 of IEC 60255-5 |
| Between Contact Poles | 1000VAC 1min | Item 6 of IEC 60255-5 |
| Surge Withstand Voltage | | |
| Between open Contacts | 1500V | FCC 68 |
| Between coil & Contacts | 1500V | FCC 68 |
| Between Contact Poles | 1500V | FCC 68 |
| Shock resistance | Functional:100m/s ² 11ms; Survival:1000 m/s ² 6ms | IEC 68-2-27 Test Ea |
| Vibration resistance | 10Hz~55Hz Double amplitude Functional : 1.5mm Survival:5mm | IEC 68-2-6 Test Fc |
| Terminals strength | 5N | IEC 68-2-21 Test Ua1 |
| Solderability | 235 $^{\circ}$ C \pm 2 $^{\circ}$ C 3s \pm 0.5s | IEC 68-2-20 Test Ta method 1 |
| Temperature Range | -40 $^{\circ}$ C~65 $^{\circ}$ C(-40 $^{\circ}$ F~149 $^{\circ}$ F) (-40 $^{\circ}$ C~70 $^{\circ}$ C for 0.4W Coil) | |
| Mass | Approx. 4.5g | |

Safety approvals

| Safety approval | UL&CUR | TÜV |
|-----------------|----------------------|----------------------|
| Load | 2A/30VDC 0.6A/125VAC | 2A/30VDC、0.6A/125VAC |

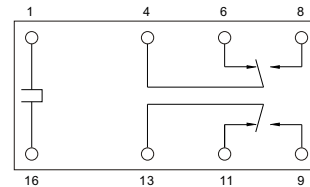
Dimensions

mm/inch

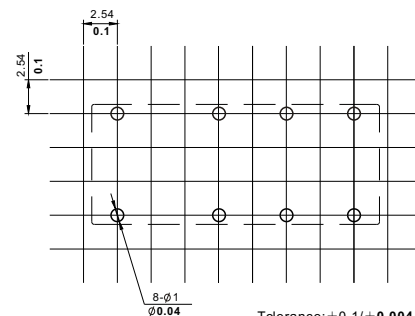


*Note: 12.3max. (48V, 0.4W)

Dimensions

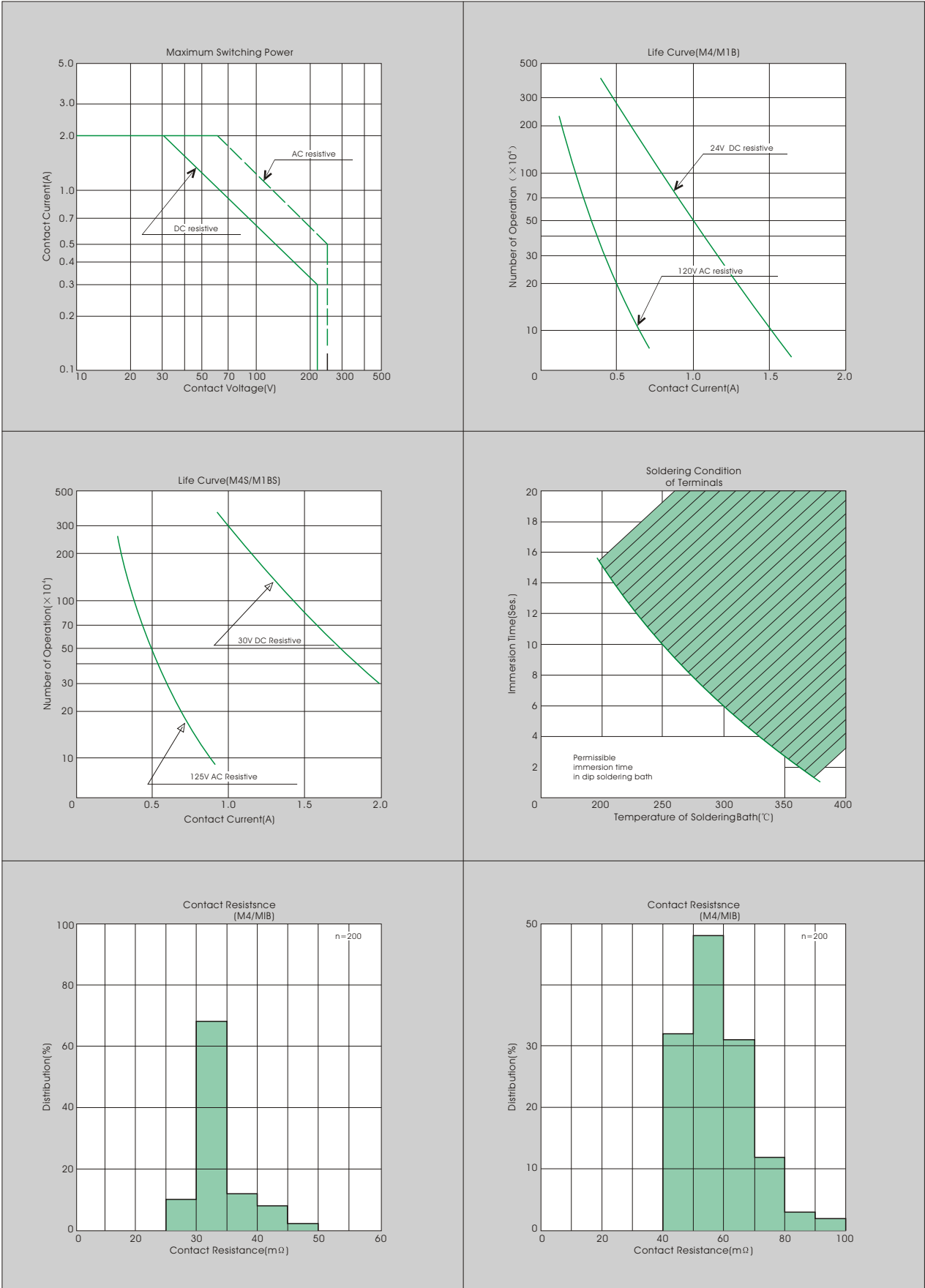


Wiring diagram
(Bottom view)



Mounting (Bottom view)

- NOTES 1).Dimensions are in millimeters.
2).Inch equivalents are given for general information only.



M4/M1B Series Data

