

Double Pole, Electrically Held, 1 Amp and Less (Continued)

**Microwave Switching,
Hermetically Sealed, DPDT
MW6 & MW6HP Models
6 GHz. Switching**

Electrical Characteristics

Contact Arrangement —
2 Form C (DPDT)

Contact Resistance —
Before life — 100 milliohms, max.
(measured @ 10 mA @ 6 VDC)
After life — 200 milliohms, max.
(measured @ 1 A @ 28 VDC)

Mechanical Life Expectancy —
10 million operations

Coil Voltages —
5, 12, 18 & 26.5 VDC (MW6)
5, 6, 9, 12, 18 & 26.5 VDC (MW6HP)

Coil Power (mW max. @ 25°C) —
MW6 MW6S MW6HP MW6HPS
675 565 673 563

Duty Cycle — Continuous

Pick-up Voltage —
MW6 — Approx 70% of nominal.
MW6HP — Approx 50% of nominal.

Pick-up Sensitivity (mW max. @
25°C) —
MW6 MW6S MW6HP MW6HPS
180 90 123 68

Operating Characteristics

Operate Time (ms max.) —
MW6 MW6S MW6HP MW6HPS
4.0 6.0 2.0 4.0

Release Time (ms max.)
MW6 MW6S MW6HP MW6HPS
3.0 3.0 1.5 2.0

Bounce Time (ms max.)
MW6 MW6S MW6HP MW6HPS
— — 1.5 1.5

Dielectric Withstanding Voltage —
Between Open Contacts,
Between Adjacent Contacts and
Between Contacts and Coil —
MW6 types — 350 Vrms, 60 Hz.
MW6HP types — 500 Vrms, 60 Hz.

Insulation Resistance —
1,000 megohms @ 500 VDC

Environmental Characteristics

Temperature Range —
MW6 types — -55°C to +85°C.
MW6HP types — -65°C to +125°C.

Weight —
MW6, MW6HP: 0.09 oz. (2.55 g)
MW6S, MW6HPS: 0.12 oz. (3.40 g).

Vibration Resistance —
MW6 types — 10 G's, 10-500 Hz.
MW6HP types — 30 G's, 10-3,000 Hz

Shock Resistance —
MW6 types — 30 G's, 6 ± 1 ms.
MW6HP types — 100 G's, 6 ± 1 ms.

Contact Ratings

| Contact Load | Type | Operations Min. |
|-------------------------|-----------|-----------------|
| 1.0A @ 28VDC | Resistive | 100,000 |
| 200mA @ 28VDC (300 mH)* | Inductive | 100,000 |
| 30µA @ 50mVDC | Low Level | 10,000,000 |

* The inductive rating is only applicable to high performance models (MW6HP and MW6HPS).

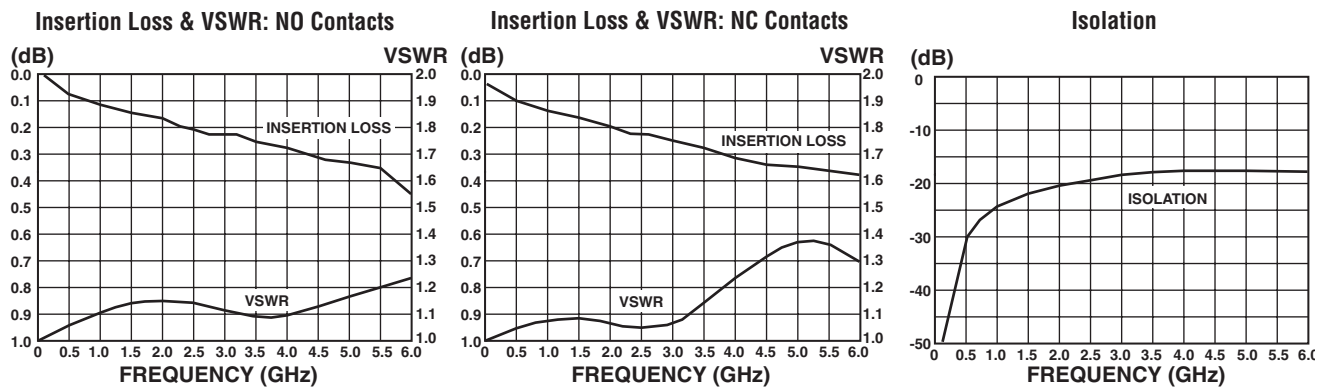
Coil Data

| MW6 Models | | | | | | | |
|---------------------------------|-------------------------------------|----------------------------------|--------------------------------|----------------------------|-------------------------------|----------------------|-------------|
| Nominal Coil Voltage (VDC) | Coil Resistance In Ohms ±20% @ 25°C | Pickup Voltage VDC (Max.) @ 25°C | Nominal Coil Power (mW) @ 25°C | Maximum Coil Voltage | Coil Desig. | | |
| Standard Coil | | | | | | | |
| 5.0 | 50 | 3.6 | 500 | 5.8 | 5 | | |
| 12.0 | 390 | 8.4 | 369 | 16.0 | 12 | | |
| 18.0 | 880 | 13.0 | 368 | 24.0 | 18 | | |
| 26.5 | 1,560 | 17.0 | 450 | 32.0 | 26 | | |
| Sensitive Coil | | | | | | | |
| 5.0 | 100 | 3.5 | 250 | 7.5 | 5 | | |
| 12.0 | 850 | 9.0 | 169 | 20.0 | 12 | | |
| 18.0 | 1,600 | 13.5 | 203 | 30.0 | 18 | | |
| 26.5 | 3,300 | 18.0 | 213 | 40.0 | 26 | | |
| MW6HP (High Performance) Models | | | | | | | |
| Nominal Coil Voltage (VDC) | Coil Res. in Ohms ±10% @ 25°C | Pickup V VDC (Max.) @25°C | Release V VDC (Max.) @25°C | Release V VDC (Min.) @25°C | Nominal Coil Power (mW) @25°C | Maximum Coil Voltage | Coil Desig. |
| Standard Coil | | | | | | | |
| 5.0 | 50 | 2.7 | 1.4 | 0.22 | 500 | 5.8 | 5 |
| 6.0 | 98 | 3.5 | 2.0 | 0.28 | 367 | 8.0 | 6 |
| 9.0 | 220 | 5.3 | 3.0 | 0.54 | 368 | 12.0 | 9 |
| 12.0 | 390 | 7.0 | 4.0 | 0.63 | 369 | 16.0 | 12 |
| 18.0 | 880 | 10.5 | 6.0 | 0.91 | 368 | 24.0 | 18 |
| 26.5 | 1,560 | 14.2 | 8.0 | 1.37 | 450 | 32.0 | 26 |
| Sensitive Coil | | | | | | | |
| 5.0 | 100 | 2.6 | 1.4 | 0.23 | 250 | 7.5 | 5 |
| 6.0 | 200 | 3.4 | 2.0 | 0.28 | 180 | 10.0 | 6 |
| 9.0 | 400 | 4.85 | 3.0 | 0.55 | 203 | 15.0 | 9 |
| 12.0 | 850 | 7.0 | 4.0 | 0.64 | 169 | 20.0 | 12 |
| 18.0 | 1,600 | 9.8 | 6.0 | 0.92 | 203 | 30.0 | 18 |
| 26.5 | 3,300 | 14.0 | 8.0 | 1.4 | 213 | 40.0 | 26 |

Double Pole, Electrically Held, 1 Amp and Less (Continued)

Microwave Switching, Hermetically Sealed, DPDT

MW6 & MW6HP Models 6 GHz. Switching (Continued)



Test Conditions

Test Board — 0.031" double sided copper clad, PTFE based laminate.

Connections — Relay header is soldered to ground plane. Relay terminals are soldered to through holes. SMA connectors are soldered to circuit traces.

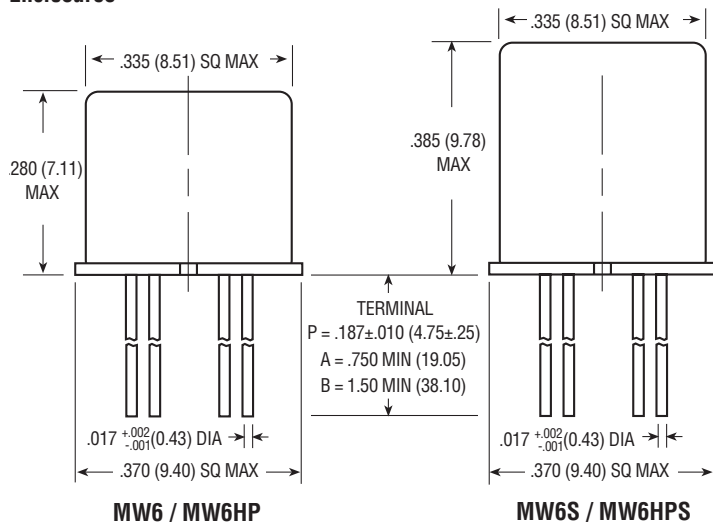
Temperature — Room ambient.

Signal Strength — 0 dBm.

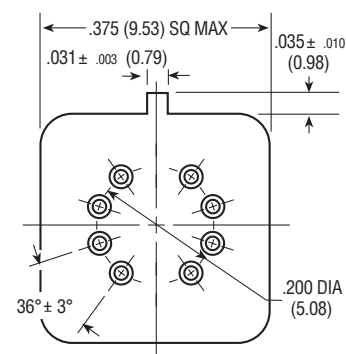
Notes:

1. Unused terminals were terminated with 50 ohm impedance load.
2. All readings are typical.

Enclosures

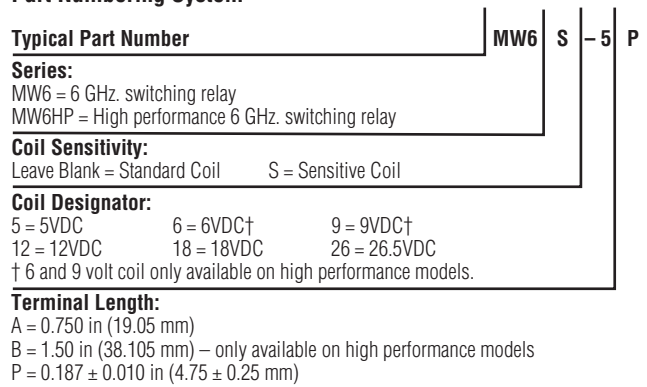


Header

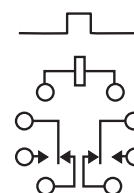


Header and Terminal Finish:
Gold plated

Part Numbering System



Wiring Diagram



Terminal View