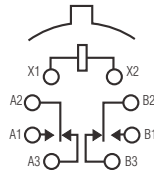


**Double Pole, Electrically Held, 1 Amp and Less** (Continued)

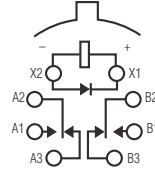
**MSV, MSVD**

**MSV**  
Sensitive  
High Vibration TO-5  
High Performance Relay

**MSVD**  
Sensitive  
High Vibration TO-5  
Diode Suppressed  
High Performance Relay



Terminal View



Terminal View

**Product Facts**

- Hermetically sealed
- Extreme shock & vibration ratings
- Spreader pads

**Product Facts**

- Suppression diode
- Hermetically sealed
- Extreme shock & vibration ratings
- Spreader pads

**Electrical Characteristics**

**Contact Arrangement** —  
2 Form C (DPDT)

**Contact Material** —  
Stationary —  
Gold/platinum/palladium/silver alloy  
(Gold plated)  
Moveable —  
Gold/platinum/palladium/silver alloy  
(Gold plated)

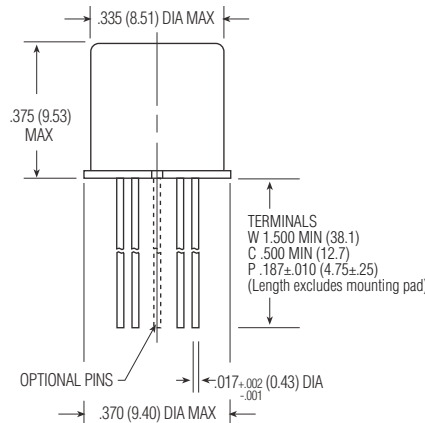
**Contact Resistance** —  
Before Life — 100 milliohms max.  
(measured @ 10 mA @ 6 Vdc)  
After Life — 200 milliohms max.  
(measured @ 1 A @ 28 Vdc)

**Mechanical Life Expectancy** —  
1 million operations

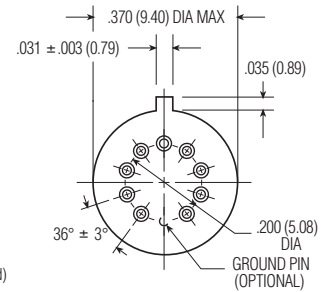
**Coil Voltage** — 5 to 26.5 Vdc  
**Coil Power** — 370 mW max. @ 25°C  
**Duty Cycle** — Continuous  
**Pick-up Voltage** — Approximately  
70% of Nominal Coil Voltage  
**Pick-up Sensitivity** — 155 mW max.  
@ 25°C

**Contact Ratings**

Contact Load	Type	Operations Min.
1.0 A @ 28 Vdc	Resistive	100,000
250 mA @ 115 Vac, 60 Hz & 400 Hz	Resistive (Case not grounded)	100,000
100 mA @ 115 Vac, 60 Hz & 400 Hz	Resistive	100,000
0.2 A @ 28 Vdc	Inductive (0.32 Henry)	100,000
0.1A @ 28 Vdc	Lamp	100,000
30 µA @ 50 mVdc	Low Level	1,000,000
0.1 A @ 28 Vdc	Intermediate Current	50,000



Enclosure



MSV/MSVDD Header

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

**MSV, MSVD** (Continued)

**Operating Characteristics**

**Operate Time** — 4.0 ms max.

**Release Time** —

MSV — 2.0 ms max.

MSVD — 7.5 ms max.

(suppression diode)

**Contact Bounce** — 1.5 ms max.

**Dielectric Withstanding Voltage** —

Between Open Contacts —

500 Vrms 60 Hz

Between Adjacent Contacts —

500 Vrms 60 Hz

Between Contacts and Coil —

500 Vrms 60 Hz

**Insulation Resistance** —

10,000 megohms min. @ 500 Vdc

1,000 megohms @ 500 Vdc (coil to case at +125°C)

**Environmental Characteristics**

**Temperature Range** —  
-65°C to +125°C

**Weight** —

0.09 oz. (2.55 grms)

0.10 oz. (2.80 grms) with spreader pad attached

**Vibration Resistance** —

100 G's, 10 - 2,000 Hz

250 G's, 140 +/- 5 Hz

350 G's, 170 +/- 5 Hz

380 G's, 200 +/- 5 Hz

**Shock Resistance** —

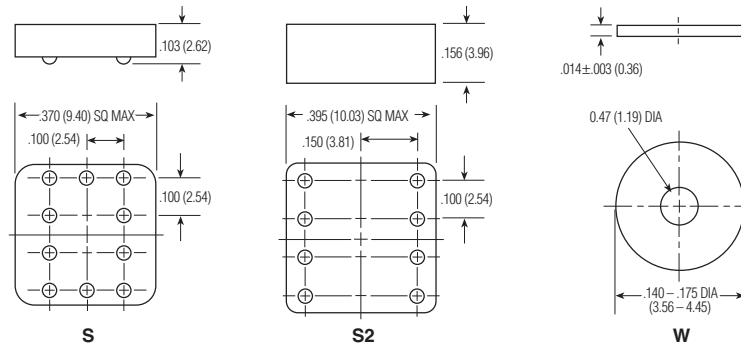
150 G's, 11 ± 1ms max.

**Semiconductor Characteristics**

**Diode** —

100 Vdc peak inverse voltage (PIV)

1.0 Vdc max. transient voltage



Spreader & Mounting Pads

**Coil Data**

Nom. Coil Voltage (Vdc)	Coil Resistance in Ohms ±10% @ 25°C	Pickup Voltage Vdc (Max.) @ 25°C	Pickup Voltage Vdc (Max.) @ 125°C	Drop-Out Voltage Vdc (Min.) @ 25°C	Drop-Out Voltage Vdc (Min.) @ -65°C	Nom. Coil Power (mW) @ 25°C	Max. Coil Voltage	Coil Desig.
MSV / MSVD								
5.0	80	3.5	4.6	0.22	0.14	313	5.8	5
6.0	120	4.0	5.5	0.28	0.18	300	8.0	6
9.0	240	5.9	8.2	0.54	0.35	338	12.0	9
12.0	480	8.0	11.0	0.63	0.41	300	16.0	12
18.0	950	11.9	16.5	0.91	0.59	341	24.0	18
26.5	1,900	15.9	22.0	1.37	0.89	370	32.0	26

**HOW TO SPECIFY A PART NUMBER**

For our standard catalog High Performance products, the Part Number begins with the series designator shown below.

<b>Specifying a Part Number Example:</b>	<b>Series</b>	<b>Terminals</b>	<b>Diodes</b>	<b>Ground Pins</b>	<b>Coils</b>	<b>Spreader/ Mounting Pads</b>
	MSV	C	D	G	-26	S