

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

HM, HMD, HS, HSD



HM, HS Standard / Sensitive TO-5 Commercial Relay



Terminal View

Product Facts

- Hermetically sealed
- Spreader Pads
- Excellent RF switching

HMD, HSD

Standard / Sensitive TO-5 Diode Suppressed Commercial Relay



Terminal View

Product Facts

- **■** Suppression Diode
- Hermetically sealed
- Spreader Pads
- **■** Excellent RF switching

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

Electrical Characteristics

Coil Voltage -

5 to 30 Vdc (HM/HMD) 5 to 48 Vdc (HS/HSD)

Coil Power -

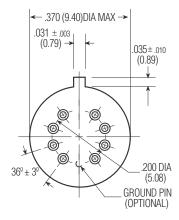
HM/HMD — 675 mW max. @ 25°C HS/HSD — 565 mW max. @ 25°C

Duty Cycle — Continuous

Pick-up Voltage — Approximately 70% of nominal coil voltage

Pick-up Sensitivity -

HM/HMD — 180 mW max. @ 25°C HS/HSD — 90 mW max. @ 25°C



Header

Contact Ratings

Contact Load	Туре	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	
0.1 A @ 28 Vdc	Lamp	100,000	
30 μA @ 50 mVdc	Low Level	1,000,000	



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(Continued)

Operating Characteristics

Timing -

Operate Time -HM/HMD — 4.0 ms max. HS/HSD — 6.0 ms max. Release Time -HM — 3.0 ms max.

HS — 3.0 ms max. HMD — 6.0 ms max.

(suppression diode) HSD — 7.5 ms max.

(suppression diode) Dielectric Withstanding Voltage —

Between Open Contacts 350 Vrms 60 Hz

Between Adjacent Contacts — 350 Vrms 60 Hz

Between Contacts & Coil -350 Vrms 60 Hz

Insulation Resistance —

1,000 megohms @ 500 Vdc

Environmental Characteristics

Temperature Range -

-55°C to +85°C

Weight -

HM/HMD — 0.09 oz. (2.55 gms)

0.099 oz. (2.80 gms) w/ spreader pad

0.12 oz. (3.40 gms)

0.129 oz. (3.45 gms) w/ spreader pad

Vibration Resistance

10 G's, 10 to 500 Hz

Shock Resistance —

30 G's. 6 ±1 ms

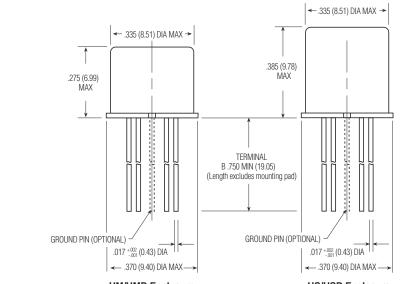
Semiconductor Characteristics

Diode

100 Vdc peak inverse voltage (PIV) 1.0 Vdc max. transient voltage

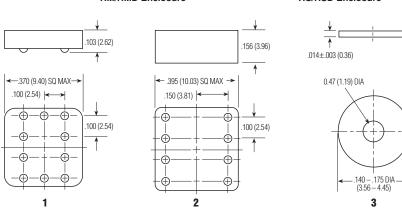
Standard Coil Data

	Nom. Coil Voltage (Vdc)	Coil Resistance in Ohms ±20% @ 25°C	Pickup Voltage Vdc (max.) @ 25°C	Nom. Coil Power (mW) @ 25°C	Max. Coil Voltage	Coil Desig.
HM/HMD	5.0	50	3.6	500	5.8	5
	6.0	98	4.2	367	8.0	6
	9.0	220	6.5	368	12.0	9
	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
	30.0	2,500	22.0	360	36.0	30
HS/HSD	5.0	100	3.5	250	7.5	5
	6.0	200	4.5	180	10.0	6
	9.0	400	6.8	203	15.0	9
	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
	36.0	6,500	24.0	199	57.0	36
	48.0	11,000	32.0	209	75.0	48





HS/HSD Enclosure



Spreader and Mounting Pads

Ordering Instructions

Catalog-selected Relays: The catalog number is derived by choosing the proper CODE for each of the relay characteristics in the order in which the codes are listed.

Specifying a Part Number Example:	<u>Type</u>	<u>Diodes</u>	Ground Pin	Spreader/Mounting Pads	<u>Coils</u>	<u>Terminals</u>
	HM	D	X	3	-26	В

to change.