

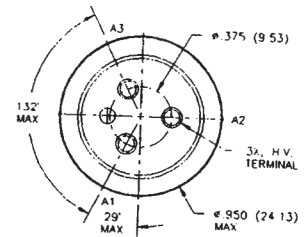
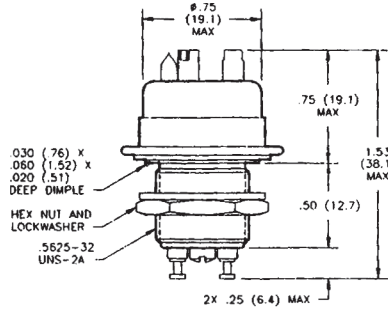
## HC Series — 3.5 kV Relays

**HC-1**  
No Load Switching

**HC-3**  
Make & Break Load Switching

### Product Facts for HC-1

- Widely used for RF applications
- Vacuum dielectric for low leakage current applications
- Copper contacts for high current capability
- Not designed for power switching
- Meets requirements of MIL-R-83725
- QPL version available, M83725/5-001



### Product Facts for HC-3

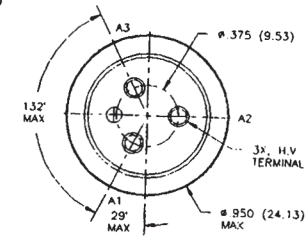
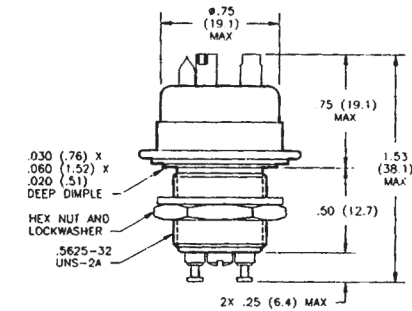
- Tungsten contacts for long life when power switching
- Vacuum dielectric for power switching low current loads

For factory-direct application assistance, dial 800-253-4560, ext. 2055, or 805-220-2055.

**HC-5**  
Make Only Load Switching

### Product Facts for HC-5

- Gas-filled for "make only" power switching
- SF-6 gas-filled for capacitive discharge applications
- Tungsten contacts for long life when power switching



### Product Specifications for HC-1, HC-3 and HC-5

Contact Arrangement — SPDT

Contact Form — C

Test Voltage, DC or 60 Hz (Peak) — 5 kV

Rated Operating Voltage (Peak) —

DC or 60 Hz — 3.5 kV

2.5 MHz — 2.5 kV

16 MHz — 2 kV

32 MHz — 1.5 kV

Continuous Carry Current, Max. —

DC or 60 Hz — HC-1 — 25 A

HC-3 — 18 A

HC-5 — 8 A

2.5 MHz — HC-1 — 14 A

16 MHz — HC-1 — 9 A

32 MHz — HC-1 — 7 A

Coil Hi-Pot (Vrms, 60 Hz) — 500 A

Contact Capacitance —

Between Open Contacts —

HC-1 — 2 pF

Open Contacts to Ground —  
HC-1 — 2.5 pF

Contact Resistance, Max. —

HC-1 — 0.01 ohm

HC-3 — 0.02 ohm

HC-5 — 0.50 ohm\*

Operate Time, Max. — 6 ms

Release Time, Max. — 6 ms

Shock, 11ms, 1/2 Sine (Peak) —  
50 g

Vibration —

Peak — 10 g (55 to 2000 Hz)

Operating Ambient Temperature

Range — -55°C to +125°C

Mechanical Life —

HC-1, HC-3 — 2 million cycles

HC-5 — 1 million cycles

Weight, Nominal —

28.35 g (1.0 oz.)

Note:

\*Contact resistance for gas-filled relays is measured at 28 Vdc, 1 Amp

### Coil Data

Nominal Volts DC	12 Vdc	26.5 Vdc	115 Vdc
Pickup, Max.	8 Vdc	16 Vdc	80 Vdc
Dropout	.5-5 Vdc	1-10 Vdc	5-50 Vdc
Coil Resistance (±10%)	80 Ω	335 Ω	6000 Ω

Ratings listed are for 25°C, sea level conditions

### Ordering Information

Sample Part Number ►

Series: \_\_\_\_\_

Model: \_\_\_\_\_

1

3

5

Coil Voltage: \_\_\_\_\_

Blank = 26.5 Vdc

/12Vdc = 12 Vdc

/115Vdc = 115 Vdc

HC- 1 /12Vdc

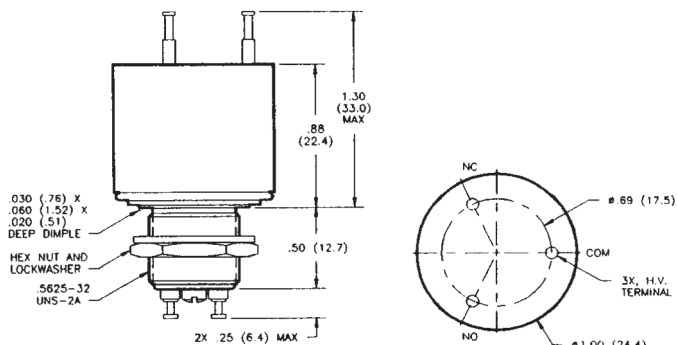
## HC Series — 8 kV Relays

**HC-2**  
No Load Switching

**HC-4**  
Make & Break Load Switching

### Product Facts for HC-2

- Vacuum dielectric and copper contacts for high current carry rating of 25 Amps
- Not designed for power switching
- Stable, low contact resistance
- Meets requirements of MIL-R-83725



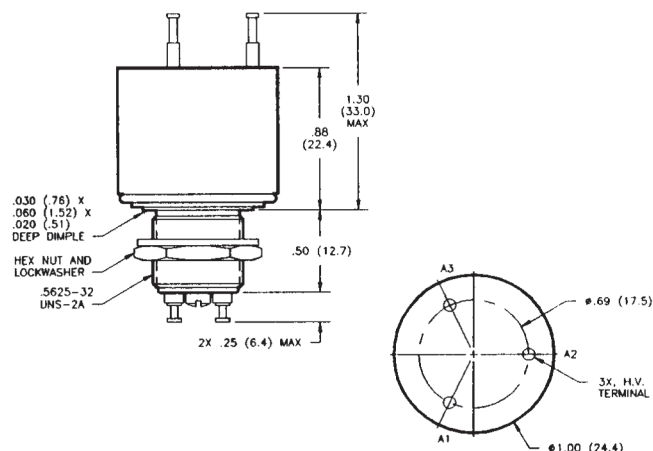
### Product Facts for HC-4

- Tungsten contacts for long life in power switching applications
- Meets requirements of MIL-R-83725
- Vacuum dielectric for arc suppression when making or breaking a load

**HC-6**  
Make Only Load Switching

### Product Facts for HC-6

- Tungsten contacts for switching high in-rush loads
- SF-6 gas-filled for capacitive discharge applications
- Suitable for ESD testing applications
- Tungsten contacts for long life in power switching applications



### Product Specifications for HC-2, HC-4 and HC-6

**Contact Arrangement** — SPDT

**Contact Form** — C

**Test Voltage, DC or 60 Hz (Peak)** — 10 kV

**Rated Operating Voltage (Peak)** — DC or 60 Hz — 8 kV

**Continuous Carry Current, Max.** — DC or 60 Hz — HC-2 — 25 A RMS  
HC-4 — 15 A RMS  
HC-6 — 8 A RMS

**Coil Hi-Pot (Vrms, 60 Hz)** — 500 A RMS

**Contact Capacitance** —

Between Open Contacts — N/A

Open Contacts to Ground — N/A

**Contact Resistance, Max.** —

HC-2 — 0.01 ohm

HC-4 — 0.02 ohm

HC-6 — 0.5 ohm\*

**Operate Time, Max.** — 6 ms

**Release Time, Max.** — 6 ms

**Shock, 11ms, 1/2 Sine (Peak)** — 50 g

**Vibration** —

Peak — 10 g (55 to 2000 Hz)

**Operating Ambient Temperature**

Range — -55°C to +125°C

**Mechanical Life** —

HC-2 and HC-4 — 2 million cycles

HC-6 — 1 million cycle

**Weight, Nominal** —

39.69 g (1.4 oz.)

\*Contact resistance for gas-filled relays is measured at 28 Vdc, 1 Amp

### Coil Data

Nominal Volts DC	12 Vdc	26.5 Vdc	115 Vdc
Pickup, Max.	8 Vdc	16 Vdc	80 Vdc
Dropout	.5-5 Vdc	1-10 Vdc	5-50 Vdc
Coil Resistance (±10%)	80 Ω	335 Ω	6000 Ω

Ratings listed are for 25°C, sea level conditions

### Ordering Information

**Sample Part Number** ► **HC- 6 /12Vdc**

**Series:** \_\_\_\_\_

**Model:** \_\_\_\_\_

2 4 6

**Coil Voltage:** \_\_\_\_\_

Blank = 26.5 Vdc

/12Vdc = 12 Vdc

/115Vdc = 115 Vdc

For factory-direct application assistance, dial 800-253-4560, ext. 2055, or 805-220-2055.