

102HV & 102V Series - High Voltage Switching Relays

SPST - NO, Up to 10mA

The 102V series of reed relays are epoxy encapsulated for HIGH voltage. 102V is capable of 10mA at 5,000VDC. The 102HV is capable of 5mA at 10,000VDC. Typical use includes dielectric testers and medical equipment.



GENERAL SPECIFICATIONS (@ 25° C)

Contacts:	102HVX	102VX
Contact Configuration	SPST-NO	SPST-NO
Contact Material	Tungsten	Tungsten
Contact Rating		
Maximum Allowable Contact Load	5mA @ 10,000VDC	10mA @ 5,000VDC
Contact Resistance, Initial	200 milliohms max @ 6VDC	200 milliohms max @ 6VDC

Coil:		
Coils Available	DC	DC
Nominal Coil Power	580mW	1.5W
Input Voltage Tolerance - AC	N/A	N/A
Input Voltage Tolerance - DC	80% to 110% of nominal	80% to 110% of nominal
Drop out voltage	10% of nominal	10% of nominal
Duty	Continuous	Continuous

Timing:		
Operate Time (max)	3mS	3mS
Release Time (max)	2mS	2mS

Dielectric Strength:		
Across Open Contacts	12,000 VRMS	12,000 VRMS
Between Mutually Insulated Points	12,000 VRMS	12,000 VRMS
Insulation Resistance	1000 megohms @ 500VAC	1000 megohms @ 500VAC

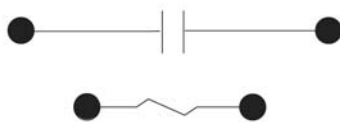
Temperature:		
Operating	-40 to 85°C (-40 to 185°F)	-40 to 85°C (-40 to 185°F)
Storage	-40 to 105°C (-40 to 221°F)	-40 to 105°C (-40 to 221°F)

Life Expectancy:		
Electrical (full load operations)	1,000,000	1,000,000
Mechanical (no load operations)	10,000,000	10,000,000

Miscellaneous:		
Shock	30 G's 11mS, 1/2 Sine Wave	30 G's 11mS, 1/2 Sine Wave
Vibration	10 G's 10Hz to 1000Hz	10 G's 10Hz to 1000Hz
Mounting Position	Any	Any
Enclosure	Potted	Potted
Weight	1.7oz (49 grams)	1.7oz (49 grams)

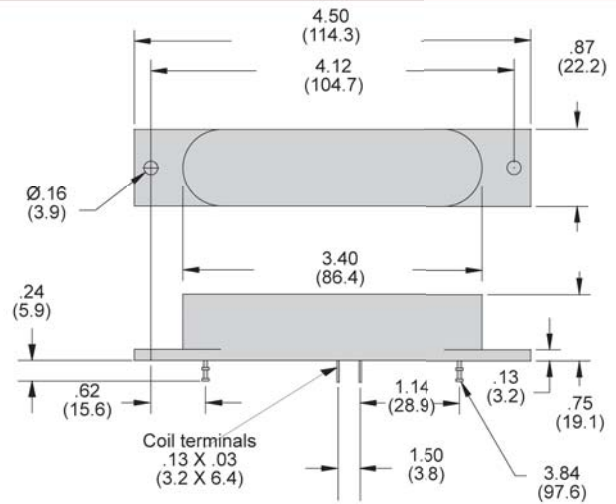
Special Purpose Relays

**102HV & 102V Wire Diagram
(Top View)**



Outline Dimensions

Dimensions Shown in inches & (millimeters)



Do not hook wire heavier than #22 AWG. Excess stress on terminals could cause damage to internal components.

Section 5

102HV & 102V Part Number Chart

Part numbers	Contact configuration	Nominal input voltage	Nominal resistance (ohms)	Nominal power (mW)
5,000 Volts normally open				
102VX-49	SPST-NO	6VDC	70	500
102VX-50	SPST-NO	12VDC	250	580
102VX-51	SPST-NO	24VDC	1000	580
10,000 Volts normally open				
102HVX-3	SPST-NO	24VDC	400	1.5 Watts