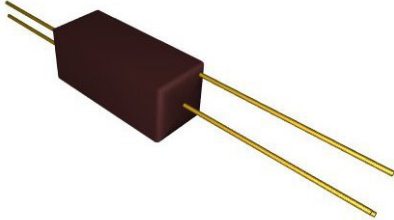


94W Form A Series High Insulation Resistance /High Voltage



PRODUCT DESCRIPTIONS

The 94W series is standard mercury relay lined up from 1 Form A to 4 Form A configuration with flexible board connection feature. This package allows flexible mounting position. Mercury contacts provides higher contact rate. Featured electrostatic shield improves signal noise ratio.

SPECIFICATIONS

94W 1A Series		94W-1A□1N0			
Parameters	Units	1 Form A			Test Conditions
Coil Specifications					
Nominal Coil Voltage	VDC	5.0	12.0	24.0	±10% @ 20°C @ 20°C @ 20°C
Coil Resistance	Ω	150	800	2000	
Operate Voltage	VDC Max	3.75	8.8	17.6	
Release Voltage	VDC Min	0.7	1.2	2.4	
Contact Ratings					
Switching Voltage	Volts	1000			Max DC/Peak AC resistance
Switching Current	Amps	1.0			Max DC/Peak AC resistance
Carry Current	Amps	5.2			Max DC/Peak AC resistance(@30°C)
	Amps	2.6			Max DC/Peak AC resistance(@60°C)
Contact Rating	Watts	50			Max DC/Peak AC resistance
Life Expectancy	x10 ⁶ Cycle	1000			@ 1V 10mA
Contact Resistance	mΩ	80			Max initial @ operate voltage
Contact Resistance Stability	mΩ	2.0			Max initial @ operate voltage
Relay Specifications					
Insulation Resistance	Ω Min	10 ¹⁰			Between all isolated pins @ 100V 20°C 65%RH
Dielectric Strength(Static)	VDC Min	1500			Between contacts
	VDC Min	1500			Contacts to shield
	VDC Min	1500			Contact to coil (Except Shield to coil)
Operate Time (No Bounce)	msec Max	3.0			@ nominal coil voltage 10~100Hz square wave
Release Time	msec Max	3.0			Diode suppression
Measurement Reference Conditions			Environmental Ratings		
Temp: 15°C to 35°C Humidity: 25% to 75%RH Atmospheric Pressure: 860 to 1060hpa			Storage temp: -20°C to +80°C Operate temp: -10°C to +60°C Vibration: 20G's to 2000Hz Shock: 50G's		

Ordering Code:

94W-1A□1N0, 94W-2A□1N0, 94W-3A□1N0, 94W-4A□1N0

□=1(5.0VDC), 2(12.0VDC), 3(24.0VDC)

94W 2A Series		94W-2A□1N0			
Parameters	Units	2 Form A			Test Conditions
Coil Specifications					
Nominal Coil Voltage	VDC	5.0	12.0	24.0	±10% @ 20°C @ 20°C @ 20°C
Coil Resistance	Ω	130	800	2000	
Operate Voltage	VDC Max	3.75	8.8	17.6	
Release Voltage	VDC Min	0.7	1.2	2.4	
Contact Ratings					
Switching Voltage	Volts	1000			Max DC/Peak AC resistance
Switching Current	Amps	1.0			Max DC/Peak AC resistance
Carry Current	Amps	5.2			Max DC/Peak AC resistance(@30°C)
	Amps	2.6			Max DC/Peak AC resistance(@60°C)
Contact Rating	Watts	50			Max DC/Peak AC resistance
Life Expectancy	x10 ⁶ Cycle	1000			@ 1V 10mA
Contact Resistance	mΩ	80			Max initial @ operate voltage
Contact Resistance Stability	mΩ	2.0			Max initial @ operate voltage
Relay Specifications					
Insulation Resistance	Ω Min	10 ¹⁰			Between all isolated pins @ 100V 20°C 65%RH
Dielectric Strength(Static)	VDC Min	1500			Between contacts
	VDC Min	1500			Contacts to shield
	VDC Min	1500			Contact to coil (Except Shield to coil)
Operate Time (No Bounce)	msec Max	3.0			@ nominal coil voltage 10~100Hz square wave
Release Time	msec Max	3.0			Diode suppression
Measurement Reference Conditions			Environmental Ratings		
Temp: 15°C to 35°C Humidity: 25% to 75%RH Atmospheric Pressure: 860 to 1060hpa			Storage temp: -20°C to +80°C Operate temp: -10°C to +60°C Vibration: 20G's to 2000Hz Shock: 50G's		

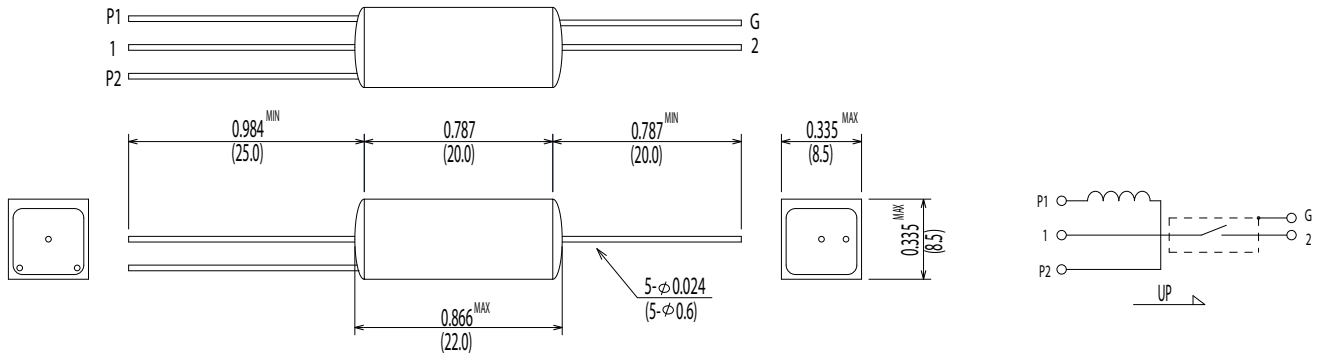
94W 3A Series		94W-3A□1N0			
Parameters	Units	3 Form A			Test Conditions
Coil Specifications					
Nominal Coil Voltage	VDC	5.0	12.0	24.0	±10% @ 20°C @ 20°C @ 20°C
Coil Resistance	Ω	80	400	1600	
Operate Voltage	VDC Max	3.75	8.8	17.6	
Release Voltage	VDC Min	0.7	1.2	2.4	
Contact Ratings					
Switching Voltage	Volts	1000			Max DC/Peak AC resistance
Switching Current	Amps	1.0			Max DC/Peak AC resistance
Carry Current	Amps	5.2			Max DC/Peak AC resistance(@30°C)
	Amps	2.6			Max DC/Peak AC resistance(@60°C)
Contact Rating	Watts	50			Max DC/Peak AC resistance
Life Expectancy	x10 ⁶ Cycle	1000			@ 1V 10mA
Contact Resistance	mΩ	80			Max initial @ operate voltage
Contact Resistance Stability	mΩ	2.0			Max initial @ operate voltage
Relay Specifications					
Insulation Resistance	Ω Min	10 ¹⁰			Between all isolated pins @ 100V 20°C 65%RH
Dielectric Strength(Static)	VDC Min	1500			Between contacts
	VDC Min	1500			Contacts to shield
	VDC Min	1500			Contact to coil (Except Shield to coil)
Operate Time (No Bounce)	msec Max	3.0			@ nominal coil voltage 10~100Hz square wave
Release Time	msec Max	3.0			Diode suppression
Measurement Reference Conditions			Environmental Ratings		
Temp: 15°C to 35°C Humidity: 25% to 75%RH Atmospheric Pressure: 860 to 1060hpa			Storage temp: -20°C to +80°C Operate temp: -10°C to +60°C Vibration: 20G's to 2000Hz Shock: 50G's		

94W 4A Series		94W-4A□1N0			
Parameters	Units	4 Form A			Test Conditions
Coil Specifications					
Nominal Coil Voltage	VDC	5.0	12.0	24.0	
Coil Resistance	Ω	60	300	1200	±10% @ 20°C
Operate Voltage	VDC Max	3.75	8.8	17.6	@ 20°C
Release Voltage	VDC Min	0.7	1.2	2.4	@ 20°C
Contact Ratings					
Switching Voltage	Volts	1000			Max DC/Peak AC resistance
Switching Current	Amps	1.0			Max DC/Peak AC resistance
Carry Current	Amps	5.2			Max DC/Peak AC resistance(@30°C)
	Amps	2.6			Max DC/Peak AC resistance(@60°C)
Contact Rating	Watts	50			Max DC/Peak AC resistance
Life Expectancy	x10 ⁶ Cycle	1000			@ 1V 10mA
Contact Resistance	mΩ	80			Max initial @ operate voltage
Contact Resistance Stability	mΩ	2.0			Max initial @ operate voltage
Relay Specifications					
Insulation Resistance	Ω Min	10 ¹⁰			Between all isolated pins @ 100V 20°C 65%RH
Dielectric Strength(Static)	VDC Min	1500			Between contacts
	VDC Min	1500			Contacts to shield
	VDC Min	1500			Contact to coil (Except Shield to coil)
Operate Time (No Bounce)	msec Max	3.0			@ nominal coil voltage
Release Time	msec Max	3.0			10~100Hz square wave Diode suppression
Measurement Reference Conditions			Environmental Ratings		
Temp: 15°C to 35°C Humidity: 25% to 75%RH Atmospheric Pressure: 860 to 1060hpa			Storage temp: -20°C to +80°C Operate temp: -10°C to +60°C Vibration: 20G's to 2000Hz Shock: 50G's		

Dimensions All Dimensions are inches (mm)

Schematic <Top View>

94W-1A□1N0

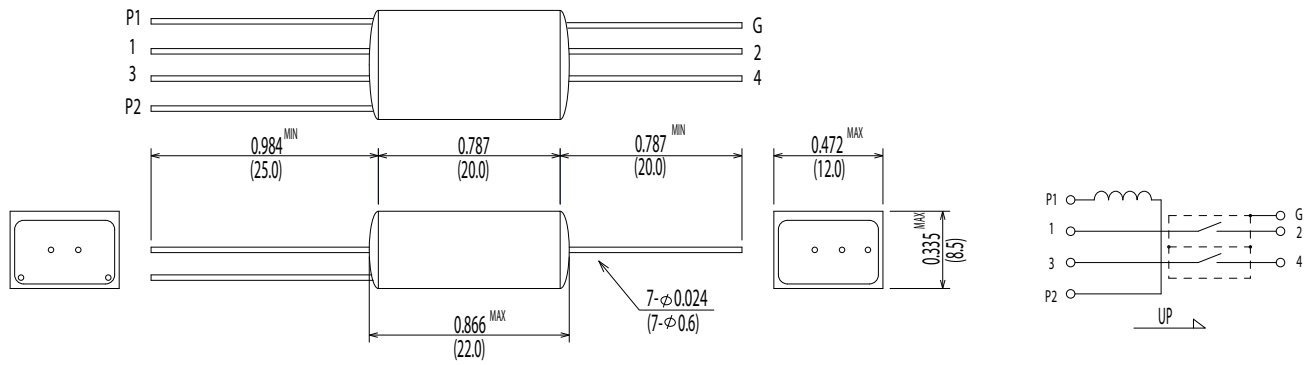


Note: Hg wet contacts must be mounted within 30° of vertical plane.

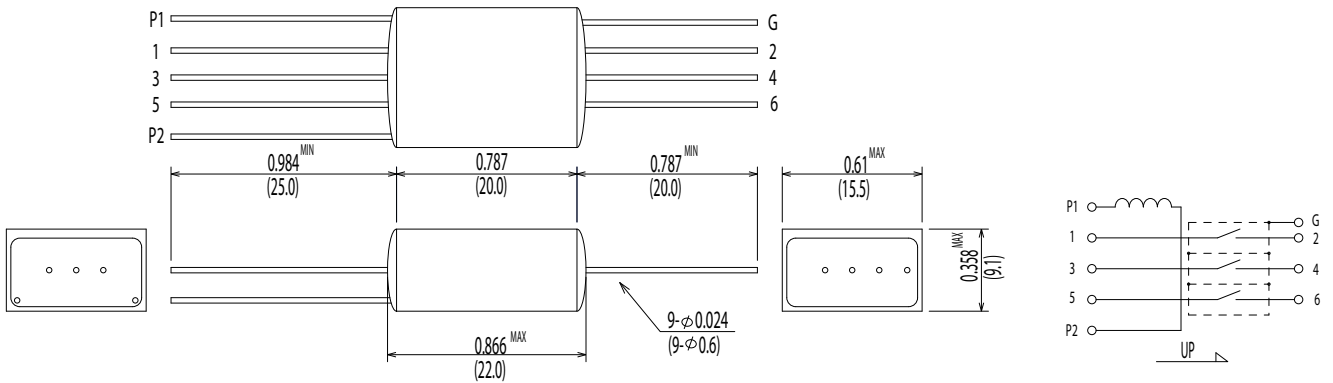
Dimensions All Dimensions are inches (mm)

Schematic <Top View>

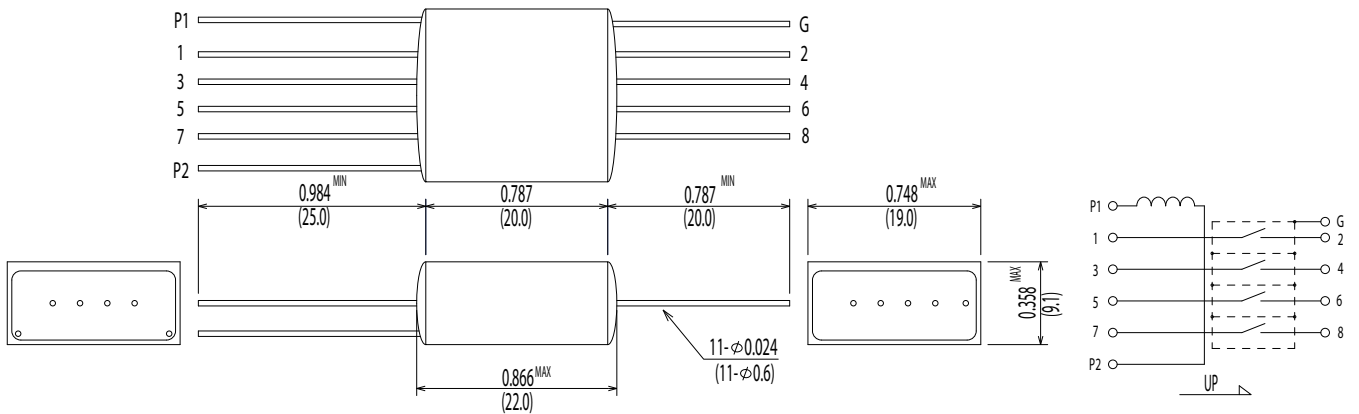
94W-2A□1N0



94W-3A□1N0



94W-4A□1N0



Note: Hg wet contacts must be mounted within 30° of vertical plane.