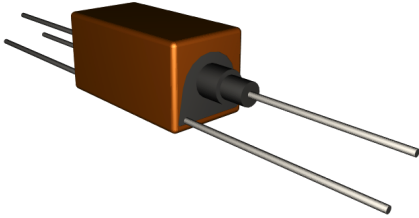


90D Series

High Insulation Resistance

PRODUCT DESCRIPTIONS



The 90D series is a high insulation resistance relay with a flexible board connection feature. The insulation resistance is rated 10^{13} (switch contacts), which is ideal for current measurement in 10^{-12} amps range. With its flexible pin connection length, this series has been widely used in DC characteristic verification for proto device, and maintenance for DC parametric test systems.



SPECIFICATIONS

90D Series		90D-1A21K32	90D-2A21K32	90D-3A□1K32			
Parameters	Units	1 Form A	2 Form A	3 Form A			Test Conditions
Coil Specifications							
Nominal Coil Voltage	VDC	12.0	12.0	5.0	12.0	24.0	±10% @ 20°C @ 20°C @ 20°C
Coil Resistance	Ω	1000	1200	125	800	2400	
Operate Voltage	VDC Max	8.8	8.8	3.75	8.8	17.6	
Release Voltage	VDC Min	1.2	1.2	0.7	1.2	2.4	
Contact Ratings							
Switching Voltage	Volts	350					Max DC/Peak AC resistance
Switching Current	Amps	1.0					Max DC/Peak AC resistance
Carry Current	Amps	2.8					Max DC/Peak AC resistance
Contact Rating	Watts	50					(@30°C)
Life Expectancy	x10 ⁶ Cycle	1000					Max DC/Peak AC resistance
Contact Resistance	mΩ	150					@ 1V 10mA
Contact Resistance Stability	mΩ	5.0					Max initial @ operate voltage Max initial @ operate voltage
Relay Specifications							
Insulation Resistance	Ω Min	10 ¹³					Between open contact
	Ω Min	10 ¹³					Contacts to shield/coil
	Ω Min	10 ¹⁰					Shield to coil
Dielectric Strength	VDC Min	500					@ 100V 20°C 65%RH
	VDC Min	500					Between contacts
Operate Time (Including Bounce)	VDC Min	500					Contacts to shield
	msec Max	1.0					Contacts/Shield to coil
Release Time		1.0					@ nominal coil voltage
	msec Max	1.0					100 Hz 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: -40°C to +85°C Operate temp: -20°C to +80°C Vibration: 20G's to 2000Hz Shock: 50G's			

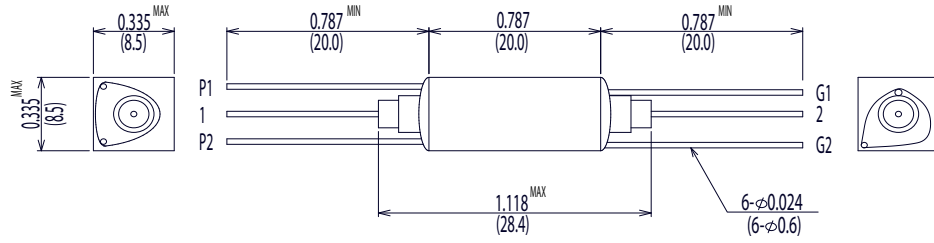
Ordering Code:

90D-3A□1K32

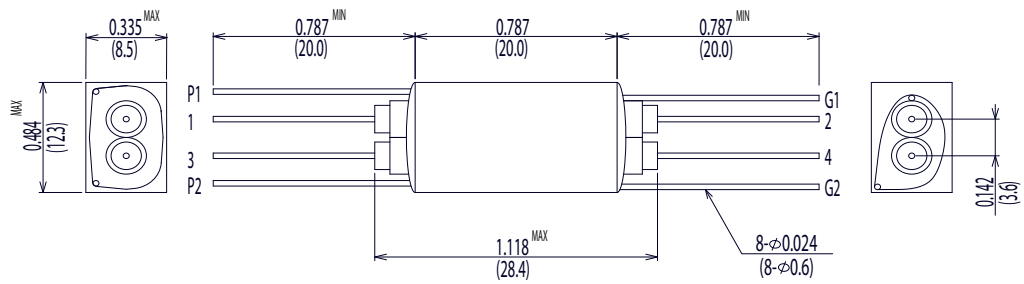
□=1 (5.0VDC), 2(12.0VDC), 3(24.0VDC)

Dimensions All Dimensions are inches (mm)

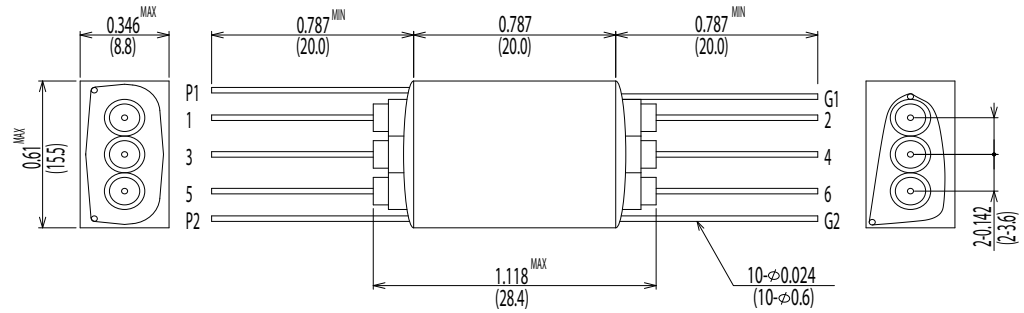
90D-1A21K32



90D-2A21K32

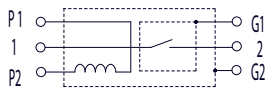


90D-3A□1K32

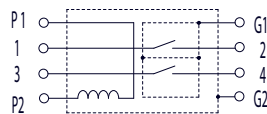


Schematic <Top View>

90D-1A21K32



90D-2A21K32



90D-3A□1K32

