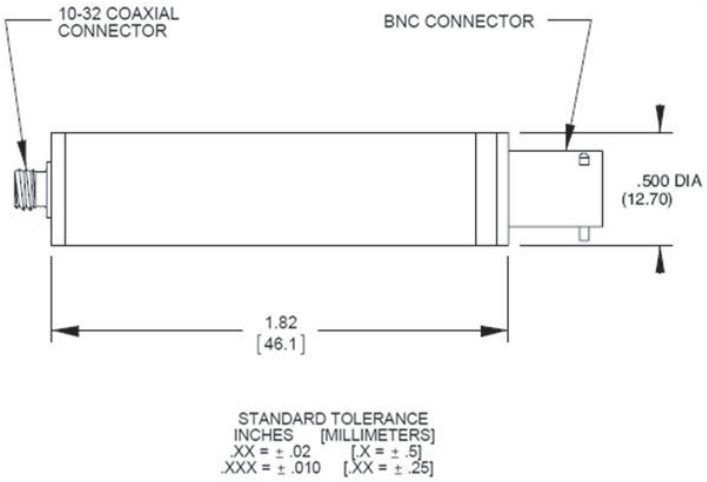
ENDEVCO
AN AMPHENOL COMPANY

Calibration capacitator

Model 2947C



Key features

- Allows simulation of a piezoelectric transducer charge output
- Precision 1000 pF shielded capacitor
- Used for charge amplifier calibration
- Converts voltage to charge
- Easy to use

Description

The Endevco® model 2947C is a stable, precision, 1000 pF shielded capacitor designed specifically for calibrating charge sensing amplifiers.The voltage output from a signal generator is readily converted to a charge signal by connecting a capacitor in series between the generator and charge amplifier.

The transfer function is: Q = EC
Where:
Q = Charge, in picocoulombs (pC)
E = Voltage, in volts (V)
C = Capacitance, in picofarads (pF)

Since the capacitor is exactly 1000 pF, the transfer function simplifies to Q (pC) = E (mV). The charge must be expressed in units of pC pk if the voltage is expressed in peak units. Similarly, voltage rms converts to pC rms.

Calibration capacitator | Model 2947C

Specifications	
Inputs	
Type	Input is a signal from a voltage source
Outputs	
Type	Output is a charge signal designed to go to a charge sensing amplifier
Electrical	
Capacitance	
Typical	1000 pF ±1%
Marked	Actual capacitance measured at 72°F (22°C)
Voltage	100 VDC, or VAC pk, maximum
Environmental	
Temperature range	32°F to 122°F (0°C to 50°C)
Temperature coefficient	±0.003%/°C, typical
Humidity	Epoxy sealed, 95% R.H. maximum
Environmental	
Dimensions	1/2" d x 1.8" l (13 mm x 46 mm)
Connector	J1 Coaxial receptacle, 10-32 NF-2A threads, mates with Endevco model 3090C cable assembly
	J2 BNC type coaxial receptacle

Calibration data supplied
Capacitance, in pF, measured at 72°F (22°C) is marked on each unit. Estimated uncertainty of the measurement is ±1 pF

Notes

1. Maintain high levels of precision and accuracy using Endevco's factory calibration services. Call Endevco's inside sales force at 866-ENDEVCO for recommended intervals, pricing and turn-around time for these services as well as for quotations on our standard products.

ENDEVCO
AN AMPHENOL COMPANY

10869 NC Highway 903, Halifax, NC 27839 USA

endevco.com | sales@endevco.com | 866 363 3826

031922