

General Radio 1412-BC Decade Capacitor

SPECIFICATIONS

Capacitance: 50 pF to 1.11115 μ F in steps of 100 pF with a 0- to 100-pF variable air capacitor providing continuous adjustment with divisions of 1 pF. Capacitances for 2- and 3-terminal connections differ by about 1 pF (C_{H0} in the drawing). C_{L0} is approx 125 pF.

Min Capacitance: 50 pF with all controls set at zero.

Dielectric: Polystyrene for decade steps.

Accuracy: $\pm(0.5\% + 5 \text{ pF})$ at 1 kHz for total capacitance including 50-pF minimum for the 3-terminal connection.

Temperature Coefficient: $-140 \text{ ppm}/^\circ\text{C}$ (nominal).

Frequency Characteristics: Dc Cap/1-kHz Cap <1.001 . At higher frequencies the increase is approx $\Delta C/C = (f/f_0)^2$. The resonant frequency, f_0 , varies from over 400 kHz for a capacitance of 1 μ F to about 27 MHz for a capacitance of 150 pF when connections are made to the front terminals. f_0 is about 300 kHz and 70 MHz for rear connections and the same capacitances.

Max Operating Temperature: 65°C.

Dielectric Absorption (Voltage Recovery): 0.1% max.

Dissipation Factor: 150 to 1000 pF, 0.001, max, at 1 kHz, at 23°C and relative humidity $<50\%$; over 1000 pF, 0.0002, max, at 1 kHz.

Insulation Resistance: 10^{12} ohms, min.

Max Voltage: 500 V peak, up to 35 kHz.

Terminals: Four 938 Binding Posts with grounding link are provided on the panel. Two of the binding posts are connected to the case and located for convenient use with patch cords in 3-terminal applications. Access is also provided to rear terminals for relay-rack applications.

Mechanical: Lab-bench cabinet; brackets provided for rack mounting. DIMENSIONS (wxhxd): 17.25x3.5x6 in. (439x89x153 mm). WEIGHT: 8.5 lb (3.9 kg) net, 10 lb (4.6 kg) shipping.

Description	Catalog Number
1412-BC Decade Capacitor	1412-9410