Keysight Technologies 11742A Blocking Capacitor 0.045 to 26.5 GHz Low insertion loss

Data Sheet





The Keysight Technologies, Inc 11742A offers a new level of performance in coaxial blocking capacitors. Featuring a frequency range of 0.045 to 26.5 GHz with low SWR (< 1.11 to 12.4 GHz and <1.23 to 26.5 GHz) and low insertion loss, the 11742A is ideal for use with high frequency oscilloscopes.

The 11742A is also ideal for use in biased microwave circuits such as a DC block, suppressing low frequency signals which may affect the accuracy of your microwave and RF measurements.

The 11742A is an INSIDE block which places the capacitance in series with the center conductor, preventing low frequency signals from flowing along the center conductor. The male and female APC-3.5 mm connectors allow for excellent operation between 0.045 GHz and 26.5 GHz.

Keysight 11742A Specifications

Connector type	APC-3.5 mm (m-f)
Connector type	APC-3.3 IIIII (III-I)
Insertion loss	
0.045 to 12.4 GHz	0.35 dB maximum
12.4 to 26.5 GHz	0.70 dB maximum
Reflection coefficient	
0.045 to 8.0 GHz	0.052 maximum (1.11 SWR)
8.0 to 12.4 GHz	0.062 maximum (1.13 SWR)
12.4 to 26.5 GHz	0.102 maximum (1.23 SWR)
DC working voltage	50 V maximum
Environmental Temperature	
Non-operating	−55 °C to +75 °C
Operating	−5 °C to +60 °C
Altitude	
Non-operating	50,000 ft
Operating	15,000 ft
Humidity	Cycling 5 days, +40 °C @ 95% RH
Vibration	0.015 in. 5-55-5 Hz 15 minutes 3 axes
Shock	100 g, 1 to 2 mS, 3 times 3 planes
EMC	Radiation interference is within the requirements of MIL- STD-461, method RE02, VDE 0871, CISPR Publication 11

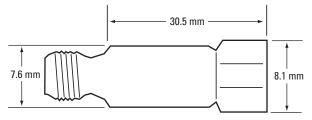


Figure 1. Outline drawing

For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list is available at: www.keysight.com/find/contactus

Americas

Canada	(877) 894 4414
Brazil	55 11 3351 7010
Mexico	001 800 254 2440
United States	(800) 829 4444

Asia Pacific

Australia	1 800 629 485
China	800 810 0189
Hong Kong	800 938 693
India	1 800 112 929
Japan	0120 (421) 345
Korea	080 769 0800
Malaysia	1 800 888 848
Singapore	1 800 375 8100
Taiwan	0800 047 866
Other AP Countries	(65) 6375 8100

Europe & Middle East

0800 001122
0800 58580
0800 523252
0805 980333
0800 6270999
1800 832700
1 809 343051
800 599100
+32 800 58580
0800 0233200
8800 5009286
0800 000154
0200 882255
0800 805353
Opt. 1 (DE)
Opt. 2 (FR)
Opt. 3 (IT)
0800 0260637

For other unlisted countries: www.keysight.com/find/contactus (BP-07-01-14)

