

## **Agilent 11742A** **Blocking Capacitor**

Data Sheet

**0.045 to 26.5 GHz**  
**Low insertion loss**



The Agilent Technologies 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.



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## Agilent 11742A Specifications

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

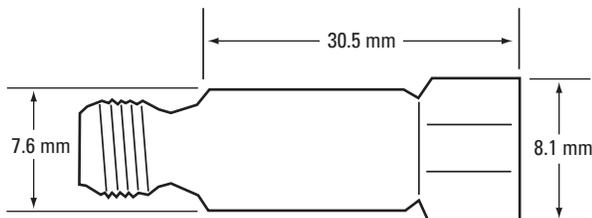


Figure 1. Outline drawing

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