DC Blocks, HR series

Inner and/or Outer Blocks
100 - 9,500 MHz

- 50 Watt Average Power Rating
- High Voltage Rating
- Minimal RF Insertion Loss
- High Reliability
- Available Off-the-Shelf
- N Connectors standard
- BNC, TNC or SMA to special order


HR-10N Inner Block


HR-10T Inner Block

The Microlab HR-50 series of DC Blocks is used to prevent the flow of direct current and low frequency current surges along the inner and/or the outer conductors of a transmission line, while permitting the unimpeded flow of RF signals. Applications include the blocking of current surges that can occur in subway tunnels and at antenna sites during lightening storms or whenever DC isolation is required.

The unit consists of a length of coaxial line with a distributed series capacitor in either or both the center conductor and outer conductor to block the flow of DC and low frequencies, while passing RF with negligible loss or reflections. Models for powers up to 500W (see HR-20, HR-22, HR-25), and options for different polarity or alternate connectors are available on request. (8/08)

RF Insertion Loss:	0.2 dB max. 1.0 dB max on HR-10N
Power Rating:	50 Watts avg., 1 kW peak
Maximum Voltage:	1000 Volts
Impedance:	50Ω nominal
Temperature:	-55°C to +150°C
Connectors:	N male and female.
Finish:	Silver or tri-plate

Connector Variations

Connector/Suffix		Inner Blocks Length in (mm)	Inner Blocks Weight oz (g)	Outer Blocks Length in (mm)	Outer Blocks Weight oz (g)
N type	N	2.1(53)	2.3(64)	2.4(61)	2.5(70)
BNC*	B	1.8(46)	0.7(20)	2.1(53)	0.9(25)
TNC*	T	1.8(46)	0.8(22)	2.1(53)	1.0(28)
SMA*	F	1.8(46)	0.8(22)	2.1(53)	1.0(28)

*special order

Frequency Range, GHz	VSWR Max.	Nominal Capacitance Inner	Nominal Capacitance Outer	Model Number
Inner Block Models:				
0.1 - 4.0	1.25:1	1000 pF	-	**HR-10N**
2.0 - 8.0	1.35:1	15 pF	-	**HR-50N**
Outer Block Models:				
1.0 - 9.5	1.25:1	-	30 pF	**HR-51N**
Inner and Outer Block Models:				
1.0 - 5.0	1.35:1	22 pF	30 pF	**HR-12N**
2.0 - 9.5	1.35:1	15 pF	30 pF	**HR-52N**

Microlab, A Wireless Telecom Group Company, 25 Eastmans Road, Parsippany, NJ 07054
Tel: (973) 386-9696 • sales@microlab.fxr.com • www.microlab.fxr.com • Fax: (973) 386-9191