

## **DC Blocks**

Inner and/or Outer Blocks Medium Power, Low Loss 100 – 9,500 MHz

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



The Microlab/FXR HR 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-D11/12 and HR-D34/36), and options for different polarity or alternate connectors are available on request. (6/01)

## **General Specifications**

RF Insertion Loss: 0.2 dB max.

1.0 dB max on HR-10 series

Power Rating: 50 Watts average

1 kW peak

 $\begin{array}{lll} \text{Maximum Voltage:} & 1000 \text{ Volts} \\ \text{Impedance:} & 50\Omega \text{ nominal} \\ \text{Temperature:} & -55^{\circ}\text{C to} + 150^{\circ}\text{C} \\ \text{Finish:} & \text{Iridite per MIL-C-5541} \\ \text{Connectors:} & \text{N male and female.} \\ \text{Connector Finish:} & \text{Silverplate per QQ-S-365} \end{array}$ 

Connector Series								
Connectors & Suffix		Inner Blocks		Outer Blocks				
		Length in.(mm)	Weight oz. (g)	Length in.(mm)	Weight oz. (g)			
N	N	2.1 (53)	2.3 (64)	2.4	2.5 (70)			
BNC	В	1.8 (46)	0.7 (20)	2.1 (53)	0.9 (25)			
TNC	Т	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)			

Basic Unit with N-connectors (N suffix)								
Frequency Range,	VSWR Max.	Nominal Capacitance		Model				
MHz		Inner Block	Outer Block	Number				
Inner Block Models								
100-4000	1.25:1	1000 pF		HR-10N				
2000-8000	1.35:1	15 pF		HR-50N				
Outer Block Model								
1000-9500	1.25:1		30 pF	HR-51N				
Inner and Outer Block Models								
1000-5000	1.35:1	22 pF	30 pF	HR-12N				
2000-9500	1.35:1	15 pF	30 pF	HR-52N				