



DC-BLOCK-3-43MF-1
DC Block



This DC Block is used to prevent the flow of direct current and low frequency current surges along the inner and outer conductors of a transmission line, while permitting the unimpeded flow of RF signals. Applications include the blocking of current surges in subway tunnels. The unit consists of a length of coaxial line with a series capacitor in both the center conductor and outer conductor to block the flow of low frequencies, while passing RF with negligible loss or reflections.

Features / Benefits

- Broadband frequency range from 80 to 3800MHz
- 3 kV High voltage rating
- Inner and Outer conductor separated
- PIM optimized design to minimize network interferences
- Minimal RF insertion loss
- 4.3-10 male/female connector

Technical Features

STRUCTURE

Product Type	DC Block
Input Connector Type	4.3-10 male
Output Connector Type	4.3-10 female

MECHANICAL SPECIFICATIONS

Diameter	42mm (1.654in)
Length	91.7mm (3.61in)
Weight	0.3kg (0.661lb)

ELECTRICAL SPECIFICATIONS

Impedance	50 Ω
Frequency Range	80 - 3800 MHz
Return Loss (Max VSWR)	15.5 dB (1.4) @ 80 - 100 MHz 17.7 dB (1.3) @ 100 - 300 MHz 26.4 dB (1.1) @ 300 - 1880 MHz 20.8 dB (1.2) @ 1880 - 2700 MHz 19 dB (1.25) @ 2700 - 3800 MHz
Insertion Loss	0.25 dB @ 80 - 3800 MHz
Intermodulation (IM3)	160dBc, typ -165dBc (2x20W)
Max. DC Blocking Voltage	3 kV

TEMPERATURE SPECIFICATIONS

Temperature Range	-40°C to 55°C (-40°F to 131°F)
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TESTING AND ENVIRONMENTAL

Environmental Class	IP67 per EN60529
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