

PRECISION RF SHORT & DC BLOCKS

DC - 18.0 GHz

PRECISION RF SHORT

GENERAL FEATURES

High Reflection Coefficient Broad Frequency Coverage Small Size

Light Weight

Rugged Construction



*M = Male Connector F = Female Connector

SPECIFICATIONS

Frequency DC $-18.0\,\mathrm{GHz}$

Overall Length 0.450" Max. (RFS-1F)

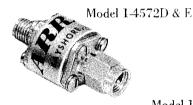
0.562" Max. (RFS-1M)

DESCRIPTION & APPLICATIONS

ARRA Type RFS Precision Shorts have been designed to give as perfect a total reflection as possible when used in a 50 ohm system with SMA connectors. The reflection coefficient is typically .99 or better. Other connectors and impedance levels are also available.

These devices are used wherever a precision broadband total reflection is required with the phase reversal of an RF Short. Phase Shift measurements, power measurements, reflectometer and many other experimental setups are adjusted and calibrated with these components. The distance from the short circuit to the connector reference plane may be adjusted to your specific requirements.

DC BLOCKS





ARRA Model 1-9572 Outside Conductor DC Block contains capacitance in series with the outer conductor which prevents the flow of DC and audio frequencies. This capacitance is designed for minimum interference with RF up to 18 GHz as evidenced by the low VSWR and insertion loss of this device. Similarly ARRA Inside Conductor DC Blocks contain capacitance in series with the inner conductor whereas ARRA Inside/Outside Con-

GENERAL SPECIFICATIONS

Frequency Range 0.1-18.0 GHz

Impedance...... 50 ohms

Connectors SMA Male & Female

ductor DC Blocks contain capacitance in series with both the inner and outside conductors. Applications include signal source modulation leakage suppression, ground loop elimination, system signal-to-noise ratio improvement, test setup isolation, and other situations where undesired DC or audio flows in the system outer and/or inner conductor.

Type of Block	Frequency Range (GHz)	Max. Insertion Loss (dB)	Max. VSWR	Overall Length (in.)	Model No.
Outside	0.1-18.0	0.2 (0.5-7.5 GHz) 0.3 (7.5-12.0 GHz) 0.65 (0.1-0.5, 12.0-18.0 GHz)	1.3 1.5 1.6	0.875	1-9572
Inside	0.1-4.0	0.5	1.3	1.250	1-4572D
	3.0-12.4	0.5	1.5	1.250	4-6572D
Inside/Outside	0.1-4.0	0.75	1.5	1.250	1-4572E
	3.0-12.4	0.75	1.6	1.250	4-6572E
Broadband Inside/Outside	0.5-4.0 4.0-12.4 12.4-18.0	0.2 0.3 0.5	1.25 1.5 1.6	1.250	1-9572E