ALLCOM PRODUCTS

Connecting and Protecting the World™
Since 1996

SF Series *800-5400 MHz*

Multi strike, 50 Ohm, dc blocked filter design (no gas tube) surge arrestor. Excellent intermod and loss performance at high frequency.

SF-800 Series	800-1400 MHz
Power Rating:	500W: 800-1400 MHz
SF-1200 Series	1200-2500 MHz
Power Rating:	300W: 1200-2500 MHz
SF-2000 Series	2000-3500 MHz
Power Rating:	300W: 2000-3500 MHz
SF-5000 Series	5000-5400 MHz
Power Rating:	100W: 5000-5400 MHz
SF-5400 Series	5400-5800 MHz
Power Rating:	100W: 5400-5800 MHz

Filter Type Surge Suppressors
The majority of energy generated by a lightning strike falls in the frequency range from dc to 1 MHz. Surge energy above 500 MHz generated by either stepped leaders or the main strike is inconsequential. Applications above 800 MHz are ideal for filter type surge arresters that are designed to provide a sharp cutoff of energy below 500 MHz, effectively shunting all of the potentially harmful lightning strike energy to ground.

Design Advantages
Filter type surge arresters do not employ gas tubes eliminating the problems of maintenance, degradation and excitation noise inherent to gas tubes.
ALLCOM's SF Series dc blocked filter surge arresters do not use a tuned stub to achieve band pass, effectively eliminating the problem caused by resonant harmonics. By design, the center conductor has no direct path to the equipment further blocking any stray strike energy from the equipment. Finally, the removal of the 1/4 wave stub element allows the device to be designed with greater optimized bandwidth

Trade-offs
This design style cannot be used to pass control voltages to tower-top amplifiers and other equipment as the frequency of these voltages falls below the filter cutoff point. This design is also not as widebanded as gas tube designs

Technical Characteristics

Type	dc blocked filter
Connectors	type "N" female
VSWR	<=1.2:1 over frequency range
Insertion Loss	<0.30dB
Throughput	<=5 µJ @3kA 8/20 µs waveform
Surge	20kA (8/20 µs) min. 5 surges
Temp. Range	-40°C to +85°C
Rel. Humidity	up to 95%
Vibration	1G at 5Hz to 100Hz
Weatherproofing	sealed case; connector sealant included

SF Series

Integral mounting bracket for easy wall or panel installation; available 90° mounting adaptor.

Designed for easy thru-panel or bulkhead installation.

Connector weatherproofing is included, not an option at additional cost.

Weather-sealed stainless steel case provides excellent corrosion resistance for reliable long-term performance.

Stainless steel mounting hardware.

Silver plated connectors feature TFE dialectrics and either gold (type N) or silver (UHF style) plated center pins.

SF Series

Multi-strike filter design without a gas tube; this device is engeneered to protect expensive transmitters and receivers witha minimum of intermodulation noise.

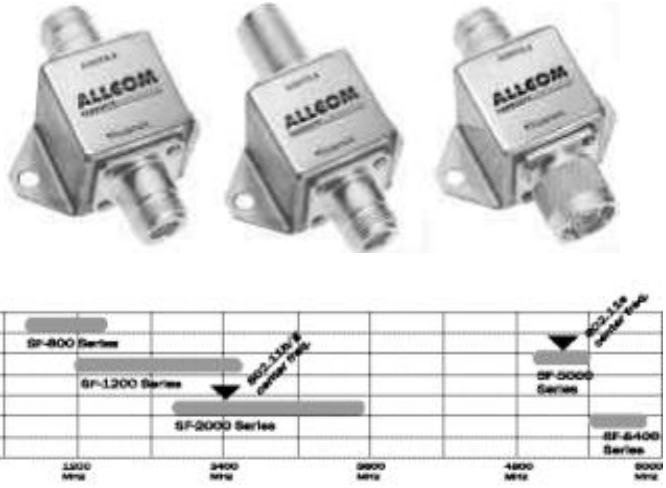
SF-800 Series
Frequency Range: 800-1400 MHz
Power Rating: 500W@800-1400 MHz

SF-1200 Series
Frequency Range: 1200--2500 MHz
Power Rating: 300W@1200-2500 MHz

SF-2000 Series
Frequency Range: 2000-3500 MHz
Power Rating: 300W@2000-3500 MHz

SF-5000 Series
Frequency Range: 5000-5400 MHz
Power Rating: 100W@5000-5400 MHz

SF-5400 Series
Frequency Range: 5400-5800 MHz
Power Rating: 100W@5400-5800 MHz



Electrical and Mechanical Specifications

Type:	DC Blocked Gas Tube
Connectors:	Type N female
VSWR:	<=1.2:1 over freq.range
Insertion Loss:	<0.3dB
Throughput:	see spec table
Surge:	20kA (8/20 µs), min. 5 surges
Turn On:	350Vdc +/- 15%
Turn On Time:	2.5 µs for 2kV/ns
Temp. Range:	-40°C to +85°C
Rel. Humidity:	up to 95%
Vibration:	1G at 5 Hz to 100 Hz
Weatherproofing:	Sealed case; connector sealant included.

SF Series—Flange Mount

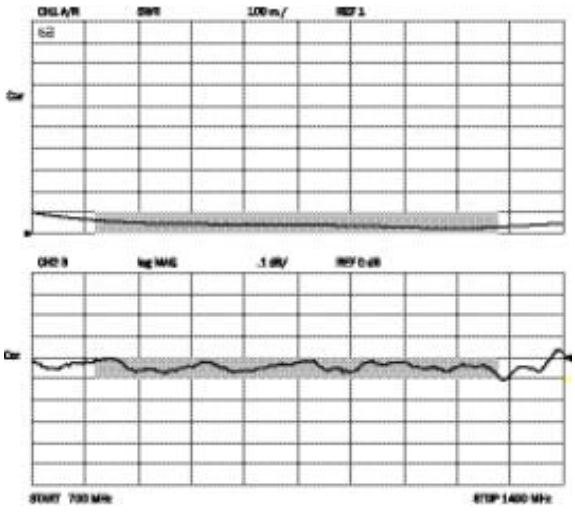
Model	Connectors (Antenna/Equipment)
SF-(XXXX)NFNF	N/female + N/female
SF-(XXXX)NMNF	N/male + N/female
SF-(XXXX)NMNM	N/male + N/male

SF Series—Bulkhead Mount

Model	Connectors (Antenna/Equipment)
SF-(XXXX)NINF	N/female bulkhead + N/female
SF-(XXXX)NINM	N/female bulkhead + N/male

/B 90° inline mounting adaptor

Typical VSWR & Insertion Loss SF-2000NFNF



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