

## PRODUCT DATASHEET **7F7FB-HYB90-02**

Hybrid Quarter Wave Surge Arrestor 7-16 DIN female - female bulkhead, 698 to 2700 MHz

This 7-16 DIN style hybrid quarter wave surge arrestor with gas capsule for high-power and low IM application is foreseen for bulkhead mounting or in-line arragement with grounding wire connection (not included) via M8 thread. Surge arrestors are designed to protect wireless base stations, switching centers and transmission line from the damaging effects of extreme high voltage surges caused by lightning strikes. Lightning strikes, even on grounded systems, can implant crushing voltages on RF transmission lines, creating voltage spikes on the center conductor of coaxial cable and putting the network out of commission. These RFS Technologies lightning protection devices are designed and tested to the most demanding specifications. They are rated to protect against both direct and indirect multiple strikes in the harshest environments imaginable. Their rugged construction utilizes solid metal housings, spring bronze contacts and 7F7FB-HYB90-02 superior plating, which results in outstanding system protection and operating continuity. FEATURES / BENEFITS • Allows 2.176MHz signal to pass for AISG systems • Broadband operation - DC and RF (698-2700 MHz) • DC continuity on center conductor for reliable operation (DC pass) Multiple strike protection provides current handling capability of 20 kA • Replaceable gas capsules for easy maintenance • Outstanding VSWR and IM performance • Water resistant to IP67 standards (mated) Reverse installation possible without performance impact **External Document Links** Notes Installation Instruction **Technical features STRUCTURE Product Line Coaxial Cable Components Product Type** Surge Arrestor Hybrid Quarter Wave **Surge Arrestor Type** Design 90° Stub **Coaxial Cable Type** Foam Dielectric, Ultraflexible Foam Dielectric, Radiating Cable **Connector Interface** 7-16 DIN



## PRODUCT DATASHEET **7F7FB-HYB90-02**

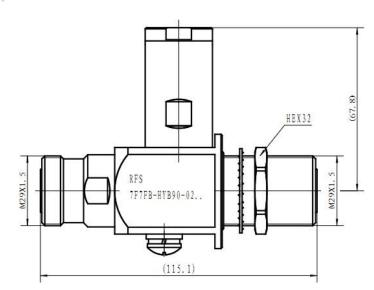
Hybrid Quarter Wave Surge Arrestor 7-16 DIN female - female bulkhead, 698 to 2700 MHz

Configuration		Bulkhead
Connector A		7-16 DIN Female
Center Contact Connector A		Brass, silver plated
Outer Contact Connector A		Brass, Tri metal
Connector B		7-16 DIN Female
Center Contact Connector B		Brass, silver plated
Outer Contact Connector B		Brass, Tri metal
Body		Brass, Tri metal
Dielectric		PTFE
Gasket		Silicone rubber
Mounting / Grounding		Bulkhead; Thread for grounding M8
ELECTRICAL SPECIFICATIONS		
Frequency Range - MHz		698 - 2700
VSWR, Return Loss	VSWR (dB)	698 - 725 MHz: 1.25 (19.1) 725 - 800 MHz: 1.20 (20.8) 800 - 2675 MHz: 1.18 (21.7) 2675 - 2700 MHz: 1.25 (19.1)
Insertion Loss, dB (Max)	dB	0.10
3rd Order IM Product @ 2x20 Watts	dBc	< -160
Power handling		2.7 kW@698, 1.3 kW@2700 (at 20°C, sea level, VSWR 1.0)
Surge current handling capability		20 kA, 8/20 µs
Residual pulse		<350µJ (test puls 4kV 1.2/50µs)
TEMPERATURE SPECIFICATIONS		
Operation Temperature	°C (°F)	-45 to 85 (-49 to 185)
PACKAGING INFORMATION		
Package Quantity		1



## PRODUCT DATASHEET **7F7FB-HYB90-02**

Hybrid Quarter Wave Surge Arrestor 7-16 DIN female - female bulkhead, 698 to 2700 MHz



All dimensions are in mm;

## 7F7FB-HYB90-02