



This 7-16 DIN style hybrid quarter wave surge arrester with gas capsule for high-power and low IM application is foreseen for bulkhead mounting or in-line arrangement 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 superior plating, which results in outstanding system protection and operating continuity.



7F7FB-HYB90-02

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  
[Installation Instruction](#)

[Notes](#)

Technical features

STRUCTURE

Product Line		Coaxial Cable Components
Product Type		Surge Arrester
Surge Arrester Type		Hybrid Quarter Wave
Design		90° Stub
Coaxial Cable Type		Foam Dielectric, Ultraflexible Foam Dielectric, Radiating Cable
Connector Interface		7-16 DIN



**MECHANICAL SPECIFICATIONS**

<b>Configuration</b>		Bulkhead
<b>Connector A</b>		7-16 DIN Female
<b>Center Contact Connector A</b>		Brass, silver plated
<b>Outer Contact Connector A</b>		Brass, Tri metal
<b>Connector B</b>		7-16 DIN Female
<b>Center Contact Connector B</b>		Brass, silver plated
<b>Outer Contact Connector B</b>		Brass, Tri metal
<b>Body</b>		Brass, Tri metal
<b>Dielectric</b>		PTFE
<b>Gasket</b>		Silicone rubber
<b>Mounting / Grounding</b>		Bulkhead; Thread for grounding M8

**ELECTRICAL SPECIFICATIONS**

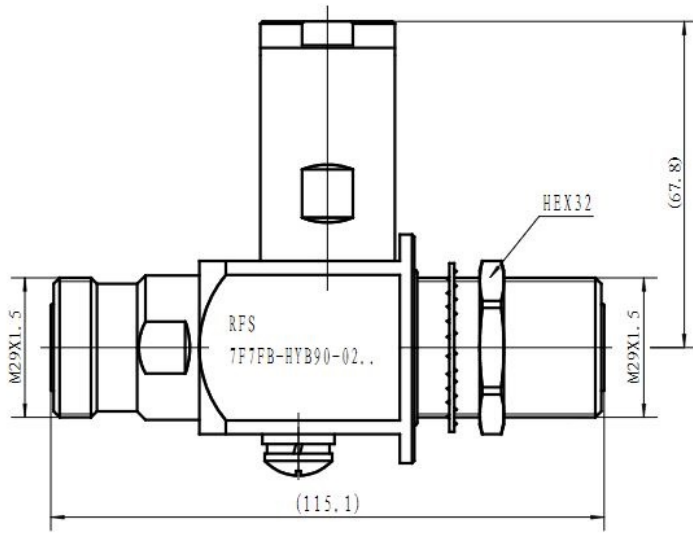
<b>Frequency Range - MHz</b>		698 - 2700
<b>VSWR, Return Loss</b>	VSWR (dB)	698 - 725 MHz: 1.25 (19.1) 725 - 800 MHz: 1.20 (20.8) 800 - 2675 MHz: 1.18 (21.7) 2675 - 2700 MHz: 1.25 (19.1)
<b>Insertion Loss, dB (Max)</b>	dB	0.10
<b>3rd Order IM Product @ 2x20 Watts</b>	dBc	< -160
<b>Power handling</b>		2.7 kW@698, 1.3 kW@2700 (at 20°C, sea level, VSWR 1.0)
<b>Surge current handling capability</b>		20 kA, 8/20 μs
<b>Residual pulse</b>		<350μj (test puls 4kV 1.2/50μs)

**TEMPERATURE SPECIFICATIONS**

<b>Operation Temperature</b>	°C (°F)	-45 to 85 (-49 to 185)
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**PACKAGING INFORMATION**

<b>Package Quantity</b>		1
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All dimensions are in mm;