



APC-BDFDM-450A

Quarterwave Surge Arrestor (Cylindrical), 380–520 MHz, with interface types DIN Female Bulkhead and DIN Male, Includes Hardware

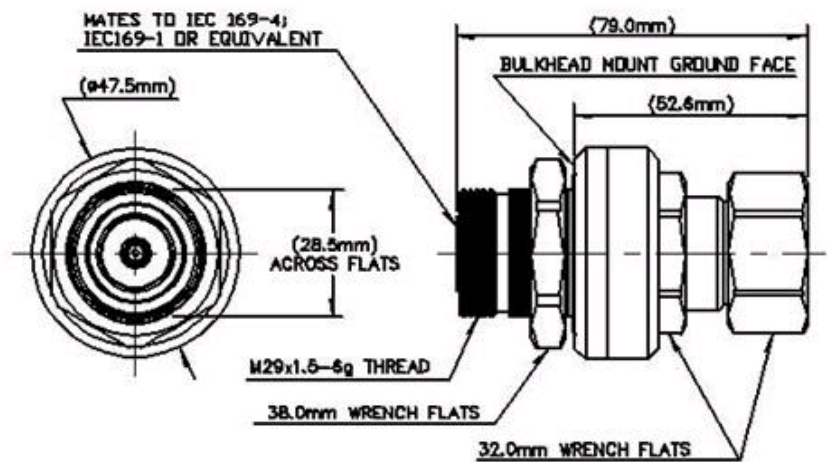
General Specifications

Interface	7-16 DIN Female Bulkhead
Interface 2	7-16 DIN Male
Body Style	Bulkhead

Electrical Specifications

Operating Frequency Band	380 – 520 MHz 411 – 494 MHz
3rd Order IMD	-117.0 dB
3rd Order IMD Test Method	Two +43 dBm carriers
Connector Impedance	50 ohm
Lightning Surge Capability	100 times @ 40 kA
Lightning Surge Capability Test Method	IEEE C62.42-1991
Lightning Surge Capability Waveform	8/20 waveform
Lightning Surge Current	40 kA
Lightning Surge Current Waveform	8/20 waveform
Insertion Loss, typical	0.10 dB

Outline Drawing



Mechanical Specifications

Attachment Durability	25 cycles
Coupling Nut Proof Torque	24.86 N-m 220.00 in lb
Coupling Nut Retention Force	1000.85 N 225.00 lbf
Coupling Nut Retention Force Method	MIL-C-39012C-3.25, 4.6.22
Inner Contact Plating	Silver
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-16:9.5
Outer Contact Plating	Trimetal
Pressurizable	No

Dimensions

Height	47.50 mm 1.87 in
Length	79.00 mm 3.11 in
Weight	0.41 kg 0.91 lb
Width	47.50 mm 1.87 in

Environmental Specifications

Corrosion Test Method	MIL-STD-202, Method 101, Test Condition B
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
Mechanical Shock Test Method	MIL-STD-202F, Method 213B, Test Condition C
Moisture Resistance Test Method	MIL-STD-202, Method 106
Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)

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Storage Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Thermal Shock Test Method	MIL-STD-202, Method 107, Test Condition A-1, Low Temperature -55 °C
Vibration Test Method	GR 2846-CORE
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP66

Standard Conditions

Attenuation, Ambient Temperature	20 °C 68 °F
Average Power, Ambient Temperature	40 °C 104 °F

Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
380–520 MHz	1.29	18.00
411–494 MHz	1.17	22.00

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

* Footnotes

Immersion Depth	Immersion at specified depth for 24 hours
Insertion Loss, typical	0.05√freq (GHz) (not applicable for elliptical waveguide)