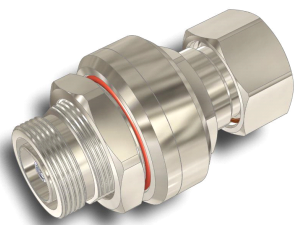


APC-BDFDM-450A



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

Product Classification

Product Type Surge arrester

General Specifications

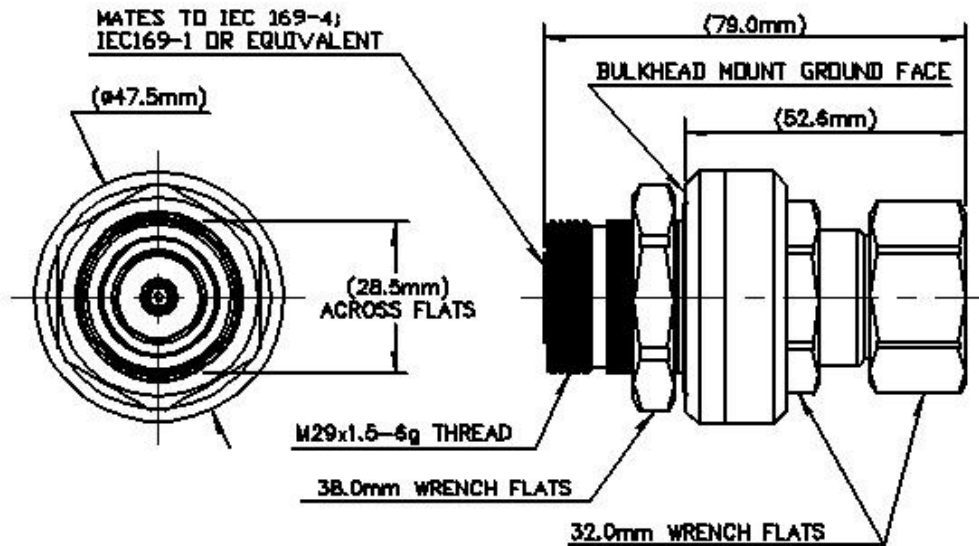
Interface 7-16 DIN Female Bulkhead
Interface 2 7-16 DIN Male
Device Type dc Block
Ordering Note CommScope® non-standard product
Body Style Bulkhead

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

APC-BDFDM-450A

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

APC-BDFDM-450A

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)
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 9001:2015	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)