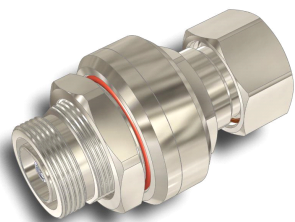


APC-BDFDM-450A



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

Product Classification

Product Type Surge arrester

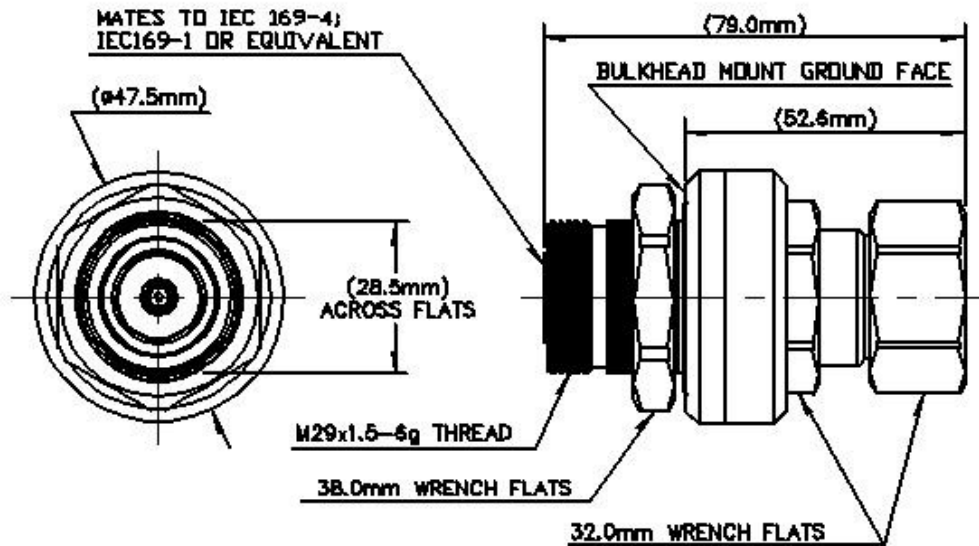
General Specifications

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

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) |