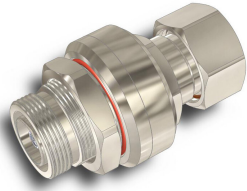


# APC-BDFDM-450A

---



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

## Product Classification

<b>Product Type</b>	Surge arrester
<b>Ordering Note</b>	CommScope® non-standard product

## General Specifications

<b>Device Type</b>	dc Block
<b>Body Style</b>	Bulkhead
<b>Inner Contact Plating</b>	Silver
<b>Interface</b>	7-16 DIN Female Bulkhead
<b>Interface 2</b>	7-16 DIN Male
<b>Outer Contact Plating</b>	Trimetal
<b>Pressurizable</b>	No

## Dimensions

<b>Height</b>	47 mm   1.85 in
<b>Width</b>	47.5 mm   1.87 in
<b>Length</b>	79 mm   3.11 in

## Electrical Specifications

<b>3rd Order IMD Gain</b>	-117 dB
<b>3rd Order IMD Test Method</b>	Two +43 dBm carriers
<b>Insertion Loss, typical</b>	0.1 dB
<b>Connector Impedance</b>	50 ohm
<b>Lightning Surge Capability</b>	100 times @ 40 kA
<b>Lightning Surge Capability Test Method</b>	IEEE C62.42-1991
<b>Lightning Surge Capability Waveform</b>	8/20 waveform
<b>Lightning Surge Current</b>	40 kA
<b>Lightning Surge Current Waveform</b>	8/20 waveform

# APC-BDFDM-450A

**Operating Frequency Band** 380 – 520 MHz | 411 – 494 MHz

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
380–520 MHz	1.29	18
411–494 MHz	1.173	21.98

## Mechanical Specifications

<b>Attachment Durability</b>	25 cycles
<b>Coupling Nut Proof Torque</b>	220 in lb   24.857 N-m
<b>Coupling Nut Retention Force</b>	1,000.85 N   225 lbf
<b>Coupling Nut Retention Force Method</b>	MIL-C-39012C-3.25, 4.6.22
<b>Interface Durability</b>	500 cycles
<b>Interface Durability Method</b>	IEC 61169-16:9.5
<b>Mechanical Shock Test Method</b>	MIL-STD-202F, Method 213B, Test Condition C

## Environmental Specifications

<b>Operating Temperature</b>	-40 °C to +85 °C (-40 °F to +185 °F)
<b>Storage Temperature</b>	-40 °C to +85 °C (-40 °F to +185 °F)
<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F
<b>Corrosion Test Method</b>	MIL-STD-202, Method 101, Test Condition B
<b>Immersion Depth</b>	1 m
<b>Immersion Test Mating</b>	Mated
<b>Immersion Test Method</b>	IEC 60529:2001, IP68
<b>Moisture Resistance Test Method</b>	MIL-STD-202, Method 106
<b>Thermal Shock Test Method</b>	MIL-STD-202, Method 107, Test Condition A-1, Low Temperature -55 °C
<b>Vibration Test Method</b>	GR 2846-CORE
<b>Water Jetting Test Mating</b>	Mated
<b>Water Jetting Test Method</b>	IEC 60529:2001, IP66

## Packaging and Weights

**Weight, net** 0.413 kg | 0.91 lb

# APC-BDFDM-450A

---

## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



### \* Footnotes

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