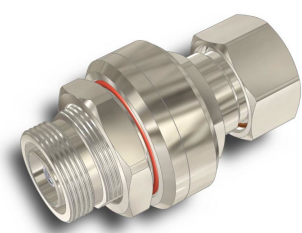


# APC-BDFDM-450A



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

## Product Classification

Product Type	Surge arrestor
Ordering Note	CommScope® non-standard product

## General Specifications

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

## Dimensions

Height	47.498 mm   1.87 in
Width	47.498 mm   1.87 in
Length	78.994 mm   3.11 in

## Electrical Specifications

3rd Order IMD Gain	-117 dB
3rd Order IMD Test Method	Two +43 dBm carriers
Insertion Loss, typical	0.1 dB
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

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<b>Lightning Surge Current</b>	40 kA
<b>Lightning Surge Current Waveform</b>	8/20 waveform
<b>Operating Frequency Band</b>	380 – 520 MHz   411 – 494 MHz

## VSWR/Return Loss

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
<b>380–520 MHz</b>	1.29	18
<b>411–494 MHz</b>	1.18	22

## 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>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

<b>Weight, net</b>	0.413 kg   0.91 lb
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## 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



## \* Footnotes

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