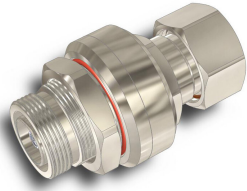


APC-BDFDM-450A



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

Product Classification

Product Type	Surge arrester
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 mm 1.85 in
Width	47.5 mm 1.87 in
Length	79 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
Lightning Surge Current	40 kA
Lightning Surge Current Waveform	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

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

Environmental Specifications

Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Storage Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Attenuation, Ambient Temperature	20 °C 68 °F
Average Power, Ambient Temperature	40 °C 104 °F
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
Moisture Resistance Test Method	MIL-STD-202, Method 106
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

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 www.commscope.com/ProductCompliance
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



* Footnotes

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