

# ABT-DMDF-ADBH

Dual Band Bias Tee Surge Arrestor, 698–960 MHz and 1700–2170 MHz, with interface types DIN Male and DIN Female



## Product Classification

**Product Type** Surge arrestor

## General Specifications

**Interface** 7-16 DIN Male  
**Interface 2** 7-16 DIN Female  
**Ordering Note** CommScope® standard product in the United States and Canada  
**Interface Port** Antenna  
**Interface 2 Port** BTS  
**Injector Port Interface** SMA Female  
**Antenna Interface Signal** dc | RF  
**BTS Interface Signal** dc Blocked | RF  
**Injector Port Interface Signal** dc

## Electrical Specifications

**Operating Frequency Band** 1710 – 2170 MHz | 698 – 960 MHz  
**3rd Order IMD** -116.0 dBm | -159.0 dBc  
**3rd Order IMD Test Method** Two +43 dBm carriers  
**Average Power** 500 W @ 883 MHz and 350 W @ 1940 MHz (Combined)  
**Connector Impedance** 50 ohm  
**Injector Port to Antenna Isolation, minimum** -70 dB  
**Lightning Surge Capability** 10 times @ 6 kA  
**Lightning Surge Current Waveform** 8/20 waveform  
**Peak Power, maximum** 12.00 kW  
**Insertion Loss, typical** 0.10 dB

## 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

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<b>dc Injector Port Inner Contact Plating</b>	Gold
<b>Inner Contact Plating</b>	Silver
<b>Interface Durability</b>	500 cycles
<b>Interface Durability Method</b>	IEC 61169-16:9.5
<b>Outer Contact Plating</b>	Trimetal
<b>Pressurizable</b>	No

## Dimensions

<b>Height</b>	41.91 mm   1.65 in
<b>Length</b>	82.04 mm   3.23 in
<b>Weight</b>	0.52 kg   1.14 lb
<b>Width</b>	39.88 mm   1.57 in

## Environmental Specifications

<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>Mechanical Shock Test Method</b>	MIL-STD-202F, Method 213B, Test Condition C
<b>Moisture Resistance Test Method</b>	MIL-STD-202, Method 106
<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>Thermal Shock Test Method</b>	MIL-STD-202, Method 107, Test Condition A-1, Low Temperature -55 °C
<b>Water Jetting Test Mating</b>	Mated
<b>Water Jetting Test Method</b>	IEC 60529:2001, IP66

## Power Supply

<b>Throughput Current, typical</b>	1 A
<b>Voltage Range</b>	-30 V to 30 V

## Standard Conditions

<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F

## Return Loss/VSWR

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
698–960 MHz	1.13	24.00
1710–2000 MHz	1.13	24.00
2000–2170 MHz	1.13	24.00

## Regulatory Compliance/Certifications

**Agency**

ISO 9001:2015

**Classification**

Designed, manufactured and/or distributed under this quality management system



### \* Footnotes

**Immersion Depth**

Immersion at specified depth for 24 hours

**Insertion Loss, typical**

0.05v\*freq (GHz) (not applicable for elliptical waveguide)