ABT-DFDM-ADBH



Dual Band Bias Tee Surge Arrestor, 698–960 MHz and 1710–2170 MHz, with interface types DIN Female and DIN Male

OBSOLETE

Product Classification

Product Type Surge arrestor

Ordering Note CommScope® standard product in the United States and Canada

General Specifications

Antenna Interface Signal RF | dc

BTS Interface Signal RF | dc Blocked

Injector Port Interface SMA Female

Injector Port Interface Signal dc

Inner Contact Plating Silver

Interface 7-16 DIN Female 7-16 DIN Male 7-16 DIN Male

Interface Port Antenna
Interface 2 Port BTS

Outer Contact Plating Trimetal

Pressurizable No

Dimensions

 Height
 42 mm | 1.654 in

 Width
 40 mm | 1.575 in

 Length
 82 mm | 3.228 in

Electrical Specifications

COMMSC PE°

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3rd Order IMD -116 dBm

3rd Order IMD Test Method Two +43 dBm carriers

Insertion Loss, typical 0.1 dB

Average Power at Frequency 350.0 W @ 1,940 MHz | 500.0 W @ 883 MHz

Connector Impedance50 ohmdc Injector Port Inner Contact PlatingGoldInjector Port to Antenna Isolation, minimum-70 dB

Lightning Surge Capability10 times @ 6 kALightning Surge Current Waveform8/20 waveform

Operating Frequency Band 1710 – 2000 MHz | 2000 – 2170 MHz | 698 – 960 MHz

Peak Power, maximum 12 kW

Throughput Current, typical 1 A

Voltage Range -30 V to 30 V

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
698-960 MHz	1.13	24.29
1710-2000 MHz	1.135	23.98
2000-2170 MHz	1 135	23 98

Mechanical Specifications

Attachment Durability 25 cycles

Coupling Nut Proof Torque220 in lb | 24.857 N-mCoupling Nut Retention Force1,000.85 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 $-40 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)

Storage Temperature $-40 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)

Attenuation, Ambient Temperature 20 °C | 68 °F

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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

Water Jetting Test Mating Mated

Water Jetting Test Method IEC 60529:2001, IP66

Packaging and Weights

Weight, net 0.517 kg | 1.14 lb

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system



* Footnotes

Insertion Loss, typical 0.05√ freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours

