

# APTDC-BDFDM-DBW



Arrestor Plus® Dual Band Quarterwave dc Passing Surge Arrestor (T-shaped) for LTE frequencies, with interface types DIN Female Bulkhead and DIN Male

## Product Classification

Product Type	Surge arrestor
Product Brand	Arrestor Plus®
Ordering Note	CommScope® standard product in the United States and Canada

## General Specifications

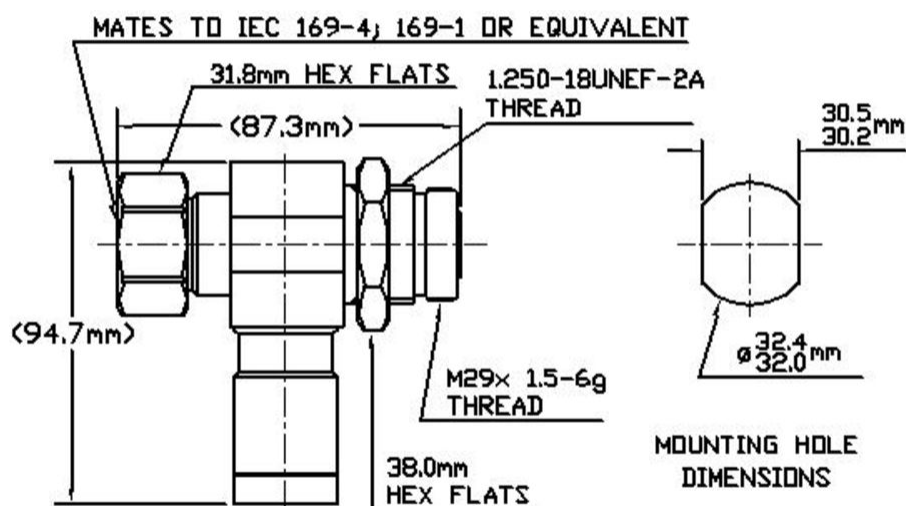
Device Type	dc Pass
Body Style	Bulkhead
Inner Contact Plating	Silver
Interface	7-16 DIN Female Bulkhead
Interface 2	7-16 DIN Male
Outer Contact Plating	Trimetal
Pressurizable	No

## Dimensions

Height	87.884 mm   3.46 in
Width	41.91 mm   1.65 in
Length	87.884 mm   3.46 in

## Outline Drawing

# APTDC-BDFDM-DBW



## Electrical Specifications

3rd Order IMD	-117 dBm
3rd Order IMD Test Method	Two +43 dBm carriers
Insertion Loss, typical	0.07 dB
Average Power	3000 W
Connector Impedance	50 ohm
dc Current, continuous	3 A
Gas Tube Voltage	90 V
Lightning Surge Capability	10 times @ 30 kA
Lightning Surge Capability Test Method	IEEE C62.42-1991
Lightning Surge Capability Waveform	8/20 waveform
Lightning Surge Current	30 kA

# APTDC-BDFDM-DBW

---

<b>Lightning Surge Current Waveform</b>	8/20 waveform
<b>Operating Frequency Band</b>	698 – 2200 MHz
<b>Peak Instantaneous Power (PIP)</b>	25 kW RF
<b>Peak Power, maximum</b>	40 kW
<b>Throughput Energy</b>	250 µJ
<b>Throughput Voltage</b>	50 V

## VSWR/Return Loss

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
<b>1.0–1.5 MHz</b>	1.14	24
<b>2.0–2.3 MHz</b>	1.14	24
<b>698–806 MHz</b>	1.14	24
<b>806–960 MHz</b>	1.11	26
<b>1710–2200 MHz</b>	1.11	26

## Mechanical Specifications

<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 +100 °C (-40 °F to +212 °F)
<b>Storage Temperature</b>	-70 °C to +150 °C (-94 °F to +302 °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

# APTDC-BDFDM-DBW

Water Jetting Test Mating	Mated
---------------------------	-------

## Packaging and Weights

Weight, net	0.599 kg   1.32 lb
-------------	--------------------

## Regulatory Compliance/Certifications

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



## \* Footnotes

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