

7/16 F/F Bulkhead Coaxial RF Surge Protector, 300MHz - 1.2GHz,  
DC Block, 2.5kW, IP67, .005uJ, 40kA, Filter, Low PIM -155 dBc



## TUSX-DFF

### Features

- Surge current of 40kA
- Max Power 2.5kW
- Frequency range from 300 MHz to 1.2 GHz
- Waterproof IP67 rated
- 7/16 DIN-type Female connectors
- DC Block
- VSWR <1.1:1
- Low insertion loss
- CE & RoHS compliant
- Bidirectional

### Applications

- Cellular communication systems
- Public safety systems
- Emergency response systems
- Industrial Communications

### Description

RF surge protector (also known as lightning arrester) TUSX-DFF from PolyPhaser utilizing a patented spiral inductor design enables an almost instantaneous response to a lightning surge to protect critical hardware while maintaining the RF performance. This RF surge protector component is manufactured in a coaxial in-line design with wide operating frequency range. All PolyPhaser RF surge protector products are available in stock with same day shipping.

### Electrical Specifications

Surge Protector Type  
DC Handling

Surge Filter  
DC Block

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.3		1.2	GHz
Impedance		50		Ohms
VSWR			1.1:1	
Insertion Loss			0.1	dB
Passive Intermodulation			-155	dBc
Input Power, CW			2.5	kWatts
Surge Current IEC 61000-4-5 8/20µs waveform			40	kA
Throughput Energy for 3kA @ 8/20µs waveform			5	nJ

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[7/16 F/F Bulkhead Coaxial RF Surge Protector, 300MHz - 1.2GHz, DC Block, 2.5kW, IP67, .005uJ, 40kA, Filter, Low PIM -155 dBc TUSX-DFF](#)

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## TUSX-DFF

### Mechanical Specifications

#### Size

Length	3.42 in [86.87 mm]
Width/Diameter	1.73 in [43.94 mm]
Weight	1 lbs [453.59 g]
Housing Material and Plating	Brass

#### Configuration

Input Connector	7/16 DIN Female
Output Connector	7/16 DIN Female

### Environmental Specifications

#### Temperature

Operating Range	-50 to 85 deg C
Storage Range	-50 to +85 deg C

Ingress Protection (IP) Rating	IP67
Vibration	1G at 5Hz to 100Hz

### Compliance Certifications (see [product page](#) for current document)

### Plotted and Other Data

Notes:

PolyPhaser protects and increases the reliability of global RF communications networks, including transportation, telecommunications, defense, security and industrial applications, with superior RF surge protection technologies including DC Block, DC Pass and Ultra Low PIM. Backed by responsive service and expert technical support PolyPhaser continually expands its product offering and services to serve engineers' urgent needs for RF components in mission critical communication networks.

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URL: <https://www.polyphaser.com/7-16-din-surge-protector-1.2ghz-filter-tusx-dff>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. PolyPhaser reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. PolyPhaser does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and PolyPhaser does not assume any liability arising out of the use of any part or documentation.

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TUSX-DFF CAD Drawing

3.42 [86.9]

2X .99 [25.0] BOTH ENDS

∅ 1.73 [43.9]

M29 X 1.5 FEMALE DIN CONNECTOR BOTH ENDS

**PolyPhaser**  
TUSX-DFF  
300MHz to 1.2GHz @ -30dB RETURN LOSS  
U.S. PATENT 6,081,223  
6,116,227, 6,296,891 & 6,488,791  
MMYY

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [ ] ARE MILLIMETERS  
TOLERANCES: FRACTIONS: 1/32 .XX±.03 ANGLES: 1° .XXX±.010  
THIRD-ANGLE PROJECTION

**PolyPhaser**  
300MHz TO 1.2GHz UHF SX BI-DIR FEM/FEM  
TITLE  
SIZE A CAGE 30992 PROD CAT RFP DRAWING NUMBER TUSX-DFF REV A

HARDWARE KIT	
QTY.	DESCRIPTION
1	O-RING 025 SILICONE
1	NUT M29 X 1.5 SST DIN
1	WASHER 1.15ID FLAT SST TYPE 304

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SHEET 1 of 1  
SCALE 1:1

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