

7/16 F/M Bulkhead Coaxial RF Surge Protector, 300MHz - 1.2GHz,  
DC Block, 1000W, IP67, .005uJ, 40kA, Filter, Low PIM -155 dBc



## TUSX-DFM

### Features

- Surge current of 40kA
- Max Power 1kW
- Frequency range from 300 MHz to 1.2 GHz
- Waterproof IP67 rated
- 7/16 DIN Female to 7/16 DIN Male 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-DFM 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

Description	Surge Protector Type		Units
	DC Handling	Surge Filter DC Block	
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		1	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/M Bulkhead Coaxial RF Surge Protector, 300MHz - 1.2GHz, DC Block, 1000W, IP67, .005uJ, 40kA, Filter, Low PIM -155 dBc TUSX-DFM](#)

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## TUSX-DFM

### Mechanical Specifications

#### Size

Length	3.32 in [84.33 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 Male

### 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

CE

### 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-surge-protector-1.2ghz-filter-tusx-dfm-p.aspx>

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-DFM CAD Drawing**

Technical drawing showing front, side, and isometric views of the TUSX-DFM surge protector. Dimensions include a height of 3.32 [84.3] and a diameter of  $\phi 1.73$  [43.9]. Labels include 'M29 X 1.5 FEMALE DIN CONNECTOR' and 'TUSX-DFM'. The drawing includes a label with the PolyPhaser logo and technical specifications.

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

**PolyPhaser**

300MHz TO 1.2GHz UHF  
SX BI-DIR FEM/MALE

UNLESS OTHERWISE SPECIFIED  
LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:  
FRACTIONS: 1/32 .XX± .03  
ANGLES: 1° .XXX± .010

THIRD-ANGLE PROJECTION

NOTE: THE INFORMATION AND DESIGN IN THIS DRAWING IS THE PROPERTY OF POLYPHASER CORP. ALL RIGHTS RESERVED.

SIZE	A	CAGE	30992	PROD CAT	RFP	DRAWING NUMBER	TUSX-DFM	REV	A
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SHEET	1	of	1
SCALE	1:1		

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

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