

4.3-10 F/M Bulkhead Coaxial RF Surge Protector, 698MHz - 2.7GHz, DC Block, Low PIM, Hazardous Location



TSX-4310FM-HL

Features

- UL and Hazardous Locations Certified
- Frequency range from 698 MHz to 2700 MHz
- DC Block
- Bidirectional
- Surge current of 40kA
- Max Power 500W
- VSWR <1.1:1
- Low Insertion Loss
- Low PIM
- Waterproof IP67 Rated

Applications

- Oil & Gas
- Industrial Facilities
- Rail
- Cellular
- Public Safety Systems
- Emergency Response Systems

Description

RF surge protector (also known as lightning arrester) TSX-4310FM-HL 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 DC Handling		Surge Filter DC Block		Units
	Minimum	Typical	Maximum		
Frequency Range	0.698		2.7		GHz
Impedance		50			Ohms
VSWR			1.1:1		
Insertion Loss			0.1		dB
Passive Intermodulation		-173	-155		dBc
Input Power, CW			500		Watts
Surge Current IEC 61000-4-5 8/20µs WAVEFORM		20	40		kA

Mechanical Specifications

Size	
Length	3.07 in [77.98 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4.3-10 F/M Bulkhead Coaxial RF Surge Protector, 698MHz - 2.7GHz, DC Block, Low PIM, Hazardous Location TSX-4310FM-HL](#)

4.3-10 F/M Bulkhead Coaxial RF Surge Protector, 698MHz
- 2.7GHz, DC Block, Low PIM, Hazardous Location



TSX-4310FM-HL

Width/Diameter	1.18 in [29.97 mm]
Height	1.18 in [29.97 mm]
Weight	0.6 lbs [272.16 g]
Housing Material and Plating	Brass, Tri-metal

Configuration

Input Connector	4.3-10 Female
Output Connector	4.3-10 Male

Environmental Specifications

Temperature

Operating Range	-50 to +85 deg C
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Ingress Protection (IP) Rating	IP67
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Compliance Certifications

RoHS Compliant	Yes
CE Compliant	Yes
UL	UL497E
Hazardous Locations Compliant	Yes
Certifications	Class 1 Div 2 Groups A, B, C, D T4 -50°C to +85°C

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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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.

TSX-4310FM-HL CAD Drawing

REVISIONS		DATE	APPROVED
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	3/10/21	DWR

MALE 4.3-10 DIN CONNECTOR (M20 X 1 NUT)
 FEMALE 4.3-10 DIN CONNECTOR (M20 X 1)
 CERTIFICATIONS MARKINGS

.69 [17.5]
 .66 [16.8]
 .87 [22]
 3.07 [78]
 .75 [19.1]
 Ø 1.18 [30]

POLYPHASER
 TSX-4310FM-HL
 698MHz to 2.7GHz
 INFC 2004
 Produced in Vietnam Under 200V
 U.S. PATENT 6,290,601
 8.466.791
 INFC 2004
 MADE IN VIETNAM

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS
 TOLERANCES:
 .X = ±.2 [5.08] FRACTIONS ± 1/32
 .XX = ±.02 [.51] ANGLES ± 1°
 .XXX = ±.005 [.13]
 CABLE LENGTH (L) TOLERANCES:
 L ≤ 12 [305] = ±1 [25] / -0
 12 [305] < L ≤ 60 [1524] = ±2 [51] / -0
 60 [1524] < L ≤ 120 [3048] = ±4 [102] / -0
 120 [3048] < L ≤ 300 [7620] = ±6 [152] / -0
 300 [7620] < L = ±5% L / -0
 ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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 SHEET 1 OF 1
 SCALE 1:1

SIZE A CAGE CODE 30992 DPM DRAWN BY PART NUMBER TSX-4310FM-HL REV A

HARDWARE KIT INCLUDES:
 QTY DESCRIPTION
 1 NUT M20 X 1 SS
 1 WASHER .82 ID FLAT SS
 1 SILICONE O-RING 019
 1 RING TERM 6AWG DIN .82" ID

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