

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



## TSX-NFM-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-NFM-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

Surge Protector Type  
DC Handling

Surge Filter  
DC Block

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.698		2.7	GHz
Impedance		50		Ohms
VSWR			1.1:1	
Insertion Loss			0.1	dB
Input Power, CW			500	Watts
Surge Current IEC 61000-4-5 8/20µs WAVEFORM		20	40	kA

### Mechanical Specifications

#### Size

Length	3.3 in [83.82 mm]
Width/Diameter	1.18 in [29.97 mm]
Height	1.18 in [29.97 mm]

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

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- 2.7GHz, DC Block, Low PIM, Hazardous Location



## TSX-NFM-HL

Weight	0.6 lbs [272.16 g]
Housing Material and Plating	Brass, Tri-metal

<b>Configuration</b>	
Input Connector	N Female
Output Connector	N Male

### Environmental Specifications

<b>Temperature</b>	
Operating Range	-50 to +85 deg C
Ingress Protection (IP) Rating	IP67

### 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:

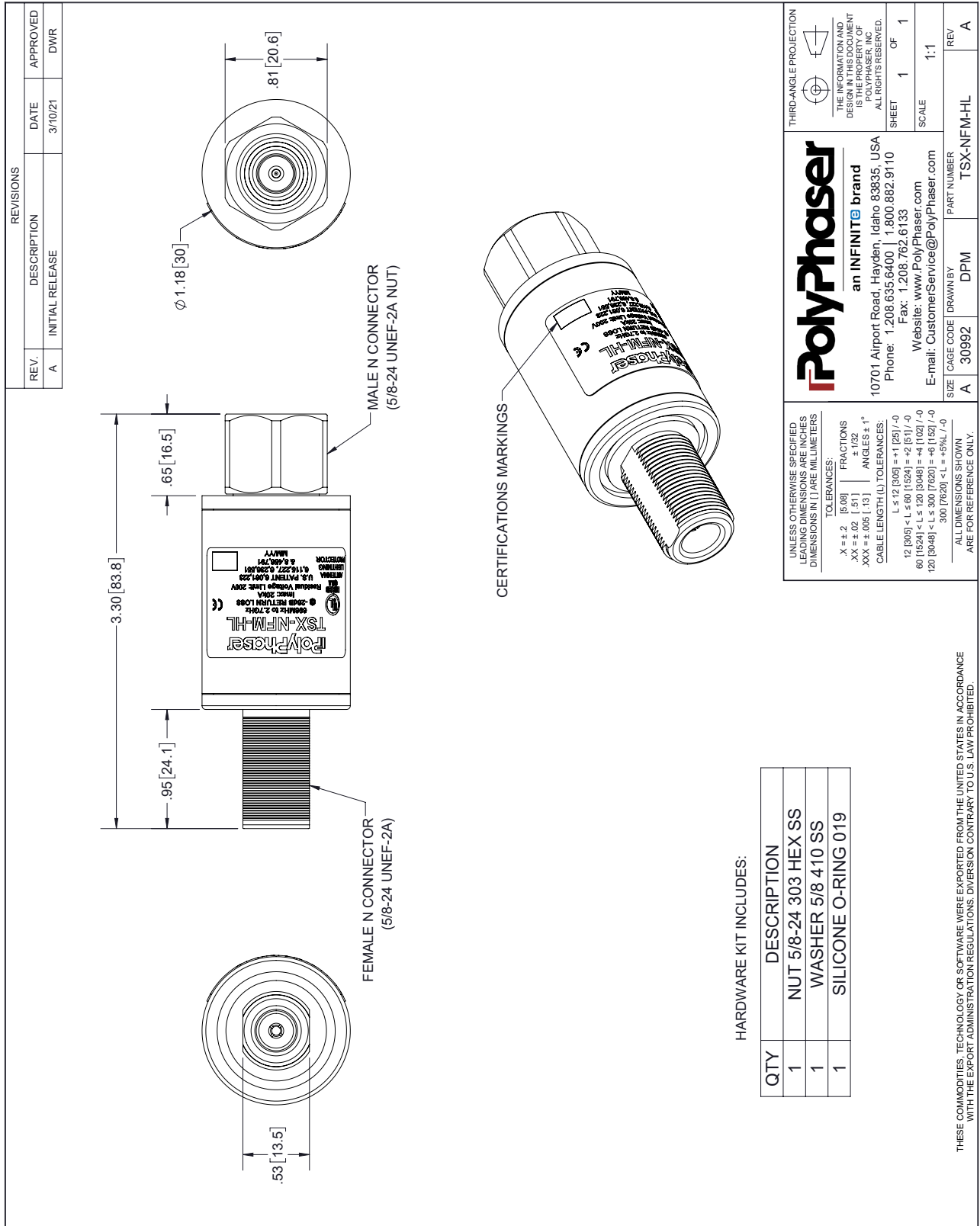
PolyPhaser protects and increases the reliability of global RF communications networks, including transportation, telecommunications, defense, security and industrial applications, with superior RF surge protection technologies including DC Block, DC Pass and Ultra Low PIM. Backed by responsive service 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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URL: <https://www.polyphaser.com/type-n-surge-protector-2.7ghz-filter-tsx-nfm-hl-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.

TSX-NFM-HL CAD Drawing



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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  
 PART NUMBER TSX-NFM-HL  
 DRAWN BY DPM  
 SIZE A  
 CAGE CODE 30992