

## COAXIAL RF SURGE PROTECTION

# 4.3-10 SX Series

PolyPhaser's SX series of surge arrestors now includes 4.3-10 connectors. Using PolyPhaser's patented spiral inductor technology, these arrestors respond almost instantaneously to a lightning surge. All models have a typical PIM rating of -130 dBm (-173 dBc, 2 x 20 W). The compact size makes it ideal for use with small cells, DAS and integration into cabinets.



TSX-4310FF-P

TSXDC-4310FF

### FEATURES

- Broad frequency range from 698 MHz to 2.7 GHz
- 4.3-10 coaxial connector
- Bi-directional for ease of installation
- Compact size compared to bulky quarter wave stub RF arrestors
- Weatherproof when installed
- Bulkhead mountable (hardware kit included)

### STANDARDS

- Weatherproof: IEC 60529 IP 67
- Bellcore TA-NWT-000487
- Procedure 4.11, Wind Driven (120 MPH)
- CE & RoHS Compliant

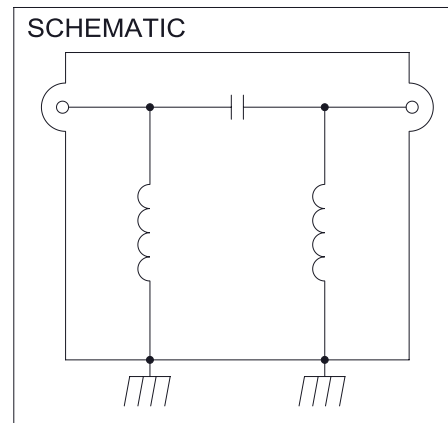
### GENERAL SPECIFICATIONS\*

Insertion Loss	0.1 dB
Return Loss	28 dB
Max Surge	40 kA, 8 x 20 $\mu$ s Waveform
Max Voltage / Current (TSXDC-4310FF/FM Only)	$\pm$ 60 Vdc / 4 A Continuous

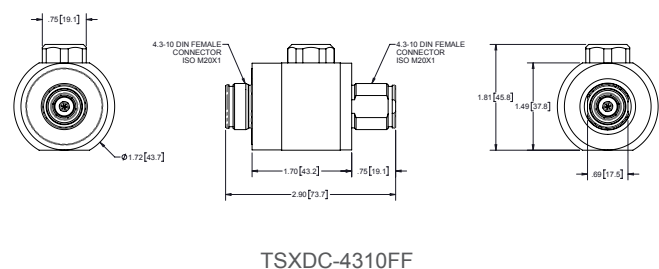
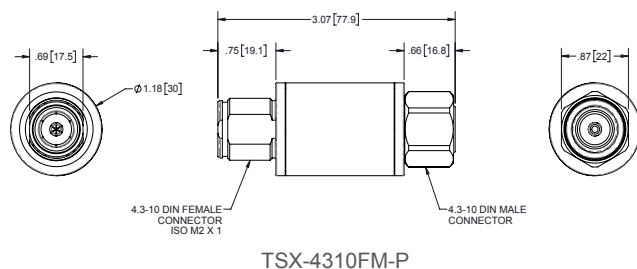
\*Please review engineering specifications on PolyPhaser.com for specific dimensions of each product.

### POLYPHASER'S LIGHTNING ARRESTOR TECHNOLOGY

The SX™ product family is based upon PolyPhaser's patented spiral inductor surge protection technology. This patented spiral inductor allows for an almost instantaneous response to a lightning surge while maintaining the RF performance. This field tested product family is used by major cellular carriers around the world, and in critical wireless communication systems used by fire, police and emergency responders.



### DIMENSIONS



### 4.3-10 DC BLOCK PART NUMBERS

Description	TSX-4310FF-P	TSX-4310FM-P
Connector	Female / Female	Female / Male
Connector Type	4.3-10	4.3-10
Frequency Range	698 MHz to 2.7 GHz	698 MHz to 2.7 GHz
Insertion Loss	Typ. $\leq 0.1$ dB	Typ. 0.1 dB
Return Loss	Typ. 28 dB Max 25 dB	Typ. 28 dB Max 25 dB
PIM	Typ: -173 dBc (-130 dBm) 2 x 20 W, Max 155 dBc (-112 dBm), 2 x 20 W	Typ: -173 dBc (-130 dBm) 2 x 20 W, Max 155 dBc (-112 dBm), 2 x 20 W
Power	500 W@920 MHz	500 W@920 MHz
Surge	40 kA Max, 20 kA multiple @ 8x20 $\mu$ s	40 kA Max, 20 kA multiple @ 8x20 $\mu$ s
Throughput Energy	Typ. 0.5 nJ, 2 kA @ 8 x 20 $\mu$ s	Typ. 0.5 nJ, 2 kA @ 8 x 20 $\mu$ s
Let Through Voltage	Typ. 300 mV, 2 kA @ 8 x 20 $\mu$ s	Typ. 300 mV, 2 kA @ 8 x 20 C

### 4.3-10 DC PASS PART NUMBERS

Description	TSXDC-4310FF	TSXDC-4310FM
Connector	Female / Female	Female / Male
Connector Type	4.3-10	4.3-10
Frequency Range	698 MHz to 2.7 GHz	698 MHz to 2.7 GHz
Insertion Loss	Typ. 0.1 dB 698 MHz to 2.6 GHz, Typ. 0.2 dB 2.6 GHz to 2.7 GHz	Typ. 0.1 dB 698 MHz to 2.6 GHz, Typ. 0.2 dB 2.6 GHz to 2.7 GHz
Return Loss	Max 23 dB 698 MHz to 750 MHz, Max 25 dB 750 MHz to 2.7GHz	Max 23 dB 698 MHz to 750 MHz, Max 25 dB 750 MHz to 2.7GHz
PIM	Typ: -173 dBc (-130 dBm) 2 x 20 W, Max 155 dBc (-112 dBm), 2 x 20 W	Typ: -173 dBc (-130 dBm) 2 x 20 W, Max 155 dBc (-112 dBm), 2 x 20 W
Power	500 W @ 920 MHz	500 W @ 920 MHz
Surge	20 kA	20 kA
Throughput Energy	Typ. 1 mJ, 2 kA @ 8 x 20 $\mu$ s	Typ. 1 mJ, 2 kA @ 8 x 20 $\mu$ s

For more information on PolyPhaser's 4.3-10 SX Series or to request a quote contact us at +1 208 772 8515.