Tii Technologies Inc.

210/212

In-Line Coaxial Lightning Surge Protectors

Tii's cutting edge In-Line® Coaxial Lightning Surge Protectors protect personnel and customer premises equipment, e.g. Televisions, Cable Set Top Boxes and Cable Modems from lightning and power induced surges on coaxial cables. They are specifically designed for today's Broadband signals carried over the coax cables.

210FF75F225-31

210MF75F225-31

212FF75F225-31

KEY PRODUCT BENEFITS

- Ideally suited to protect Broadband CATV subscriber's "COSTLY" HDTV receivers, DVRs, cable modems, home networking components and interfaces from potentially damaging surges
- Will reduce "out of warranty" repair expense caused by surge lightning damage. Reduces service outages by protecting against induced high-voltage surges that may appear on the center conductor of a coaxial drop cable
- Unique In-Line® design is impedance matched to 75 ohms and is virtually transparent to all analog or digital bi-directional signals transmitted from DC to 1.0 GHz
- Tii's patented proprietary coaxial gas tube surge protector is equipped with an integral failshort mechanism for a power-cross condition which shunts both the coaxial cable's center conductor and sheath for a common path to ground. The DC breakdown voltage of the protector provides superior protection against transient surges, yet is compatible with network powered applications.
- The protection element is designed to reset after each over voltage event
- Metallic housing of the Tii In-Line® Coaxial Lightning Surge Protector provides necessary EMI shielding
- When properly connected the protector is environmentally sealed (15 psi) to prevent ingress of moisture and humidity encountered in broadband pedestals, vaults, NIDs and stand alone applications
- Full 360° "F" port connectors provide superior RF performance and tighter connections

INDUSTRY STANDARDS

- Listed to UL 497C & CSA Certified
- Meets and exceeds Telcordia GR 2908-CORE
- Complies with 1999 National Electric Code - Article 830
- Designed with full thread, flush face "F" type connectors which conform to ANSI/SCTE 01 1996R2001 specification

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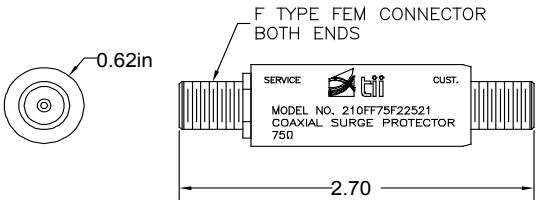
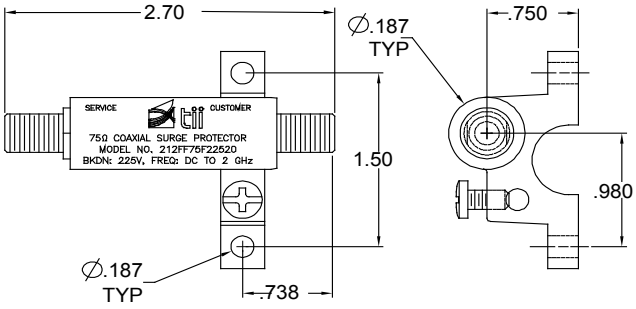


Model 210



Model 212

Dimensions are in Inches

SPECIFICATIONS

R.F. Performance			DC – 1.0 GHz
Characteristic Impedance			75 Ohms
Insertion Loss (includes Flatness)			< 0.3 dB / 0.2dB Typical
Return Loss			30 dB Typical
Protection:			
1.	**DC Breakdown @ 2000 V/Sec**		120 – 300 Volts
2.	**Impulse Breakdown @ 100 V/µSec**		< 450 Volts
3.	**Insulation Resistance**		>100 Megohms
***4.**	**Surge Life:**		
	A.	10 A, 10/1000 µSec.	>1500 Surges
	B.	100 A, 10/1000 µSec.	>100 Surges
	C.	1000 A, 10/250 µSec.	>10 Surges
	D.	5000 A, 8/20 µSec.	>10 Surges
5.	**AC Life:**		
	A.	5A, 1000 VAC, 1 Sec.	>5 Operations
	B.	1A, 1000 VAC, 1 Sec.	>60 Operations
6.	**Failshort:**		
	30 A, 1000 VAC		>15 Minutes
7.	**Operating Temperature**		-40° C to + 65° C (-40° F to 149° F)

Figures given above are for service life only.

ORDERING INFORMATION

Model No.	Description
210FF75F225-31	Female/Female Connector Configuration, "F" Type Connector
210FF75F225-311	Female/Female Connector Configuration, "F" Type Connector with 6 Inch #12 Ground Wire
210MF75F225-31	Male/Female Connector Configuration, "F" Type Connector
212FF75F225-31	Female/Female Connector Configuration, "F" Type Connector with Integral Ground Block

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