ETX-1-xx, (1.2 GHz 1 Way Tap Series)

technetix

- 5-1218 MHz
- High quality 1-way installation tap
- Technetix Modem Safe® surge protection and intermodulation reduction solution
- High Return Loss
- Technetix CPD Safe[™] NiSn plated housing, silver plated beryllium copper F-contacts
- Exceeds EN Class A screening requirements







Overview

Products within the Ecoline range excel both in electrical and mechanical performance. Though designed for use within indoor environments, they are also specified for use within street-side plant.

Ecoline products are designed for easy installation, have a compact housing and some models are stackable. All F-connectors used on Ecoline products meet the SCTE standards (ANSI SCTE 02 2015). The F-inner spring is designed to connect coax cables with an inner core of 0.65 to 1.10 mm. It retains this elasticity and provides effective clamping force even when varying thicknesses of inner conductor are connected in succession.

The intermodulation performance, which is an important factor in high level return path signals, has been greatly improved through a newly developed ferrite and specially designed circuits.

The high frequency shielding exceeds Class A requirements (EN-50083-2:2012) over the whole frequency range from 5 MHz to 1218 MHz.

Technetix Modem Safe®

Technetix Modem Safe* is a highly effective surge protection solution for sensitive network and in-home CPE. Based on passive circuits, the technology does not rely on discharge tubes, extending the lifespan of the solution.

- Blocks high and low voltage pulses and unwanted DC voltages
- Prevents internal ferrites within the product from becoming magnetised (avoiding deterioration in the performance of CPE)
- Drives fewer reported faults
- Improves customer service
- Reduces truck rolls

Technetix CPD Safe[™]

CPD (Common Path Distortion) is well known for producing signal interference on networks. It is caused by electrolytic corrosion or the oxidisation of dissimilar metals when in close contact. CPD Safe technology protects against CPD.

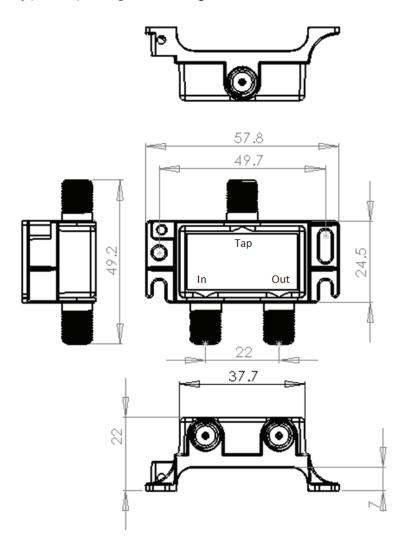
- Removes a primary source of CPD
- Reduces signal interference on the network
- Drives fewer reported faults
- Improves customer service
- Reduces truck rolls

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Mechanical

Die cast zinc alloy (Zamac 3) housing and lid. Plating: Tin Nickel.



General Specification

Cha	racteristic	Min	Тур	Max	Units	
Frequency Range	e All Ports	5		1218	MHz	
Temperature	Operating	5		+45	°C	
Range	Storage	-40		+60	°C	
	Input		75		Ω	
Impedance	Outputs		75		Ω	
Safety	Input Surge Protection	IEC61000- 4-5:2005	Level 2	+/-1 KV,	1.2/50 us	

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RF Specification

			6	dB	8 dB		10 dB		12 dB		16 dB		20 dB			
Parameter	Port(s)	Frequency (MHz)	Тур	Max	Тур	Max	Тур	Max	Тур	Max	Тур	Max	Тур	Max	Units	Notes
Insertion Loss	In-Tap	5-10	7.7		9.0		10.9		13.6		16.3		20.4		dB	5
		10-65	7.5	8.0	8.5	10.0	10.8	11.5	13.5	14.0	16.2	17.0	20.3	21.0	dB	
		65-470	6.8	7.5	8.5	9.5	10	11.0	13	13.8	16	17.0	20.0	21.0	dB	
		470-1218	6.8	7.5	8.8	9.5	10	11.0	13	13.5	16	17.0	20.3	21.0	dB	
	In-Out	5-10	2.1		1.7		1.2		1.1		0.9		0.9		dB	5
		10-65	2.1	2.5	1.6	2.0	1.2	1.3	0.9	1.2	0.8	1.1	0.8	1.1	dB	
		65-470	2.0	2.4	1.5	1.8	1.0	1.5	0.8	1.1	0.6	0.9	0.6	0.9	dB	
		470-862	2.2	2.8	1.7	2.0	1.2	1.6	0.8	1.2	0.6	1.0	0.6	1.0	dB	
		862-1006	2.5	3.0	1.8	2.2	1.3	1.8	0.9	1.3	0.7	1.0	0.7	1.0	dB	
		1006-1218	3.0	3.4	2.0	2.4	1.5	2.0	1.0	1.4	0.9	1.2	0.9	1.2	dB	
Return Loss	All Ports	5-10	18									dB	5			
		10-15	18										dB			
		15-470	20										dB	4		
		470-1006	16										dB			
		1006-1218	14								dB					
	Out-Tap	5-10	30		32		2	28 :		10	0 35		40		dB	5
		10-15	22		22		2	22		22		30		35		
		15-65	29		29		2	29		29		36		40		4
Directivity		65-470	25		25		2	5	28		33		35		dB	
		470-1006	22		22		22		27		30		33		dB	
		1006-1218	20		2	20		0	25		27		30		dB	
Intermodulation			-115 (Max)						dBc	1						
Surge Withstand	Input	1000 V	35 (Max)						V	2						
Screening Effectiveness (Min)		5-12	90										dB			
		12-30	95											dB		
		30-470	100										dB	3		
		470-1006	100										dB			
		1006-1218	90									dB				

Notes

1	Two carriers (60 & 65 MHz), Out to Tap, @ 120 dBuV, after 10 pulses (25 V/1.2 uS rise time / 500 uS duration) at Output ports. Two carriers (60 & 65 MHz), Out to Tap, @ 120 dBuV, after 1 pulses (1 k V/1.2 uS rise time / 50 uS fall time) at Input.
2	Surge pulse 1 kV/1.2 uS rise time / 50 uS fall time (IEC61000-4-5:1995)
3	EMC testing to EN-50083 (5-30 MHz Transfer impedance method, 30-950 MHz Absorbing Clamp, 0.95-2 GHz Substitution method)
4	F>40 MHz -1.5 dB/Oct, Minimum 16 dB
5	Typical values and not guaranteed

Ordering information

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Item name	Article number					
ETX-1-6	19010743					
ETX-1-8	19010744					
ETX-1-10	19010745					
ETX-1-12	19010746					
ETX-1-16	19010747					
ETX-1-20	19010748					

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