TRISX-1002 1.2 GHz fully isolated system outlet

technetix

- Single output isolator
- 1.2 GHz
- Modem Safe[™] surge protection and intermodulation reduction solution
- CPD Safe[™] Nickel plated, zinc die-cast housing and tin-nickel plated, machined brass input connector with silver plated F-inner spring
- Excellent RF performance
- Exceeds Class A+ ingress protection (EN50083-2)
- **■** Low insertion loss
- Low leakage current
- Compact design





Overview

Isolators (frequently referred to as system outlets) are used to separate the in-home installation or subscriber equipment from the CATV network. They prevent hazardous voltages from being transferred to in-home installations.

Technetix supplies two main types of isolator - fully and semi-isolated system outlets. The TRISX series comprises fully isolated system outlets developed to meet the needs of the European market. They incorporate high voltage capacitors that provide isolation to both the inner and the outer conductors of the coaxial connectors. There are a variety of one, two and three port isolators in the TRISX series as well as many accessories such as ABS housings, adaptor plates and push-on filters.

The TRISX-1002 single output isolator has a nickel plated, zinc die-cast housing and a tin-nickel plated, machined brass input connector.

Modem Safe™

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

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 cause of CPD
- Reduces signal interference on the network
- Drives fewer reported faults
- Reduces truck rolls
- Improves customer service

TRISX-1002 1.2 GHz fully isolated system outlet



Specifications

Characteristic	Port type	MHz	Min	Тур	Max	Unit	Notes
Equipment passband		5-1218					
		0.3 - 1	20			dB	
		5 - 10			0.6	dB	
Insertion loss	In to out	10 - 470		0.3	0.4	dB	
	to out	470 - 862		0.5	0.7	dB	
		862 - 1218		0.6	0.9	dB	
	All ports	5 - 10	18			dB	
Return loss		10 - 50	20			dB	
Return loss		50 - 1000	18			dB	
		1000 - 1218	16			dB	
		10 - 30		95		dB	1
		30 - 300		95		dB	1
Screening efficiency		300 - 470		90		dB	1
Class A+		470 - 950		85		dB	1
		950 - 1006	950 - 1006 85		dB	1	
		1006 - 1218		85		dB	1
Galvanic isolation 2120 V DC (max)	Inner (input) - Inner (output) Outer (input) - Outer (output)		0.2		mA	2	
Galvanic isolation 230 V AC (max)	Inner (input) - Inner (output) Outer (input) - Outer (output)		2.0		mA	2	
	No surge	urge -120			dB	3	
Intermodulation p+q (min)	25 V surge -120			dB	4		
	1 kV surge	-120				dB	5
Surge Class conformance	1 kV 1.2/50 μS		-		6,7		
Connectors	All ports	F-female					
Makadal	Housing	Nickel plated zinc die-cast					
Material	F-spring	Silver plated beryllium copper					
Impedance (typ)	Impedance (typ)		75				
Dimensions		60x38x20			mm		
Equipment approval			CE				

TRISX-1002 1.2 GHz fully isolated system outlet



Notes

	All specifications are measured at room temperature
	Operating frequency range 10 to 1218 MHz
1	Test Method for frequencies according to EN50083-2 2012 Operating frequency ranges: 10-1218 MHz according to IG 56620 01
2	Tested according to EN 60728-11 2005
3	Two carriers (60 and 65 MHz) output to output @ 120 dBμV/60 dBmV, before surge
4	Two carriers (60 and 65 MHz) output to output @ 120 dBμV/60 dBmV, after 10 pulses (25 V/1.2 μs rise time/500 μs duration) at input port, tested according to IEC 60728-4
5	Two carriers (60 and 65 MHz) output to output @ 120 dBμV/60 dBmV, after 1 pulse (1 kV 1.2 μs/50 μs, IEC 61000-4-5 2005 level 2) at input port, tested according to IEC 60728-4
6	Tested according to IEC 61000-4-5 2005
7	Additional protection via Modem Safe circuit allows a maximum output of 35 V

Order information

Item number	Item code	Description
19008921	TRISZ-1002	ISOLATOR DOUBLE GALVANIC 1 PORT F-F F-F 5-1218MH