TRISZ-DG100FB double galvanic isolator

technetix

- 2.0 GHz single output double galvanic isolator
- Best in class RF performance with new barrel design
- Integrated grounding point
- **■** Enables easy, reliable installation
- Special cabinet housing available that protects the incoming large diameter cable
- Exceeds EN Class A+ screening requirements



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 major types of isolator; fully and semi-isolated system outlets. The TRISZ-DG100FB 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.

Operating up to 2 GHz, the TRISZ-DG100FB offers an isolation solution for full DOCSIS 3.1 deployments while maintaining high levels of performance and protection.

Modem Safe®

The TRISZ-DG100FB is equipped with Modem Safe protection. 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
- Drives fewer reported faults
- Improves customer service
- Reduces truck rolls

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Specifications

Parameter	Frequency range (MHz)	Min	Тур	Max	Notes
Equipment passband	5 - 2000				
Insertion loss (dB)	12 - 1006		0.5	0.8	
	1006 - 2000		0.8	1.2	
Return loss (In, dB)	12 - 47	22			
	47 - 2000	22			1
Return loss (Out, dB)	12 - 47	22			
	47 - 2000	22			1
Screening effectiveness (m Ω /m)	12 - 30	2.2			
Companies of frontiers and (JD)	30 - 1000	95			2
Screening effectiveness (dB)	1000 - 2000	85			
Galvanic isolation 230 V AC (mA, RMS)	Inner (input) - Inner (output)	8.0		3	
	Outer (input) - Outer (output)	8.0			
Galvanic isolation 2120 V DC (mA)	Inner (input) - Inner (output)	0.7		3	
	Outer (input) - Outer (output)	0.7			
Surge class conformance		1 KV, 1.2/50 μS at input		4,5	
Connectors	Input	F-type female		6	
	Output	F-type female			
Materials	Housing and output connector	White bronze plated zinc diecast			
	Input connector	White bronze plated brass			
	F-spring	White bronze plated beryllium copper			
	ABS housing	RAL 9003			
Temperature range (°C)	Operating	5 to 45			
	Storage		-20 to 75		
Impedance (Ohm, typ)		75			
Equipment approval			CE		

Notes

1	F > 47 MHz -1.5 dB/oct, always > 14 dB		
2	According to IEC 62153-7 § 5.5 (tested with 1 metre Class A++ cable attached).		
3	IEC-60728-11 § 9 safety requirement: 2120 VDC T≥1 minute, ≤ 0.7 mA. 230 VAC ≤ 8.0 mA RMS		
4	IEC 61000-4 - 5 level 2 with ports terminated		
5	Additional protection via Modem Safe circuit allows a maximum output of 35 V		

6 F-Type female according to EN 61169-24

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Order information

Item number	Item code	Description	
19014229	TRISZ-DG100FB Isolator DG 1 port F-F 5-2000 MHz fixed barrel		
19013639 TZ-DG100FB-CH Inline cabin		Inline cabinet housing for TRISZ-DG100FB	