DOCSIS 4.0
READY

1.8 GHz

Indoor RF passives

Galvanic Isolator
4GIS-F102F

The 4GIS-F102F is a 1.8 GHz high quality Fully Isolated System Outlet which are used to galvanically separate the coaxial access network from subscribers premises. It prevents issues caused by electrical problems such as voltage surges and lightning from damaging Customer Premise Equipment.

Features

- 5-1800 MHz Bandwidth
- Protection against power surges
- Withstands 2120 VDC for at least one minute not exceeding 0.7 mA leakage current (acc. to IEC 60728-11)
- Withstands 230 VAC RMS better than ≤2.0 mA RMS (acc. to IEC 60728-11)
- Compact design with Zinc Alloy/Nickel plated die-cast housing and Nickel plated Copper back
- CE & RoHS Compliant
- Class A+ (=Class A +10dB) - IEC60728-2

One of Teleste's unique and award winning superior performance passives designed for easy installation and reliability.

TELESTE

INDOOR RF PASSIVES / 4GIS-F102F

ELECTRICAL SPECIFICATIONS

INSERTION LOSS (dB, Max.)

Frequency (MHz)	**QA**	**TYP.**
5 - 470	0.8	0.2
471 - 1000	0.9	0.4
1001 - 1800	1.1	0.7

RETURN LOSS (dB, Min.) - Input/Output

Frequency (MHz)		
5 - 40	19.0	31.0
41 - 1218	20.0	28.0
1219 - 1700	16.0	24.0
1701 - 1800	15.0	24.0

ISOLATION (dB, Min.) - OUT to OUT

5 - 1000	N/A
1000 - 1500	N/A
1500 - 1800	N/A

GENERAL SPECIFICATIONS

Nominal impedance	75 Ω	**F Connectors**	EN-61169-24 Compliant	**Dimensions**	60 x 44 x 20 mm
Housing	Zinc-alloy Nickel plated	**Operating temperature**	-20 ° to + 60 °C	**Weight**	0,064 kg
EMC compatibility [1] IEC60728-2 Class A+ (+ 10dB) 5 - 10 11 - 30 31 - 300 301 - 470 470 - 699 700 - 862 863 - 1000 1001 - 1800	 50.0 75.0 95.0 90.0 85.0 95.0 85.0 65.0		**Intermodulation p+q** [2] After 25 V surges After 1 kV surge	 -120.0 -115.0	
Galvanic isolation	2120 VDC [3]	Inner conductor (Input) to Inner conductor (Output) Outer conductor (Input) to Outer conduct. (Output)		≤ 0.7 mA RMS	
	230 VAC [4]	Inner conductor (Input) to Inner conductor (Output) Outer conductor (Input) to Outer conduct. (Output)		≤ 2.0 mA RMS	
Surge immunity [5]		1.2/50 µs combination wave, 1 KV/500 A/2 Ohm (on all ports)			

NOTES

(1) Class A +10 dB, values acc. to IEC 60728-2 plus 10 dB, EMC measured with Comet Tube System

(2) Two carriers (60 & 65 MHz), Output to Input, @ 120 dBµV, before surge
Two carriers (60 & 65 MHz), Output to Input, @ 120 dBµV, after 10 pulses (25 V/1.2 µS rise time/500 µS fall time) at all ports
Two carriers (60 & 65 MHz), Output to Input, @ 120 dBµV, after 1 pulse (1 KV/1.2 µS rise time/500 µS fall time) at all ports

(3) EN-60728-11/10 Safety Requirements: 2120 VDC ≥ 1minute, I = ≤ 0.7 mA

(4) EN-60728-11/10 Safety Requirements: 230 VAC, I = ≤ 8.0 mA

(5) IEC 61000-4-5 (Class 2,level 2 ,Combination wave 1KV)

ORDERING INFORMATION

4GIS-F102F	1-port Galvanic Isolator, 1.8 GHz, F input and F output port

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TELESTE CORPORATION
www.teleste.com

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