1 GHz GALVANIC ISOLATORS [GxG-x]

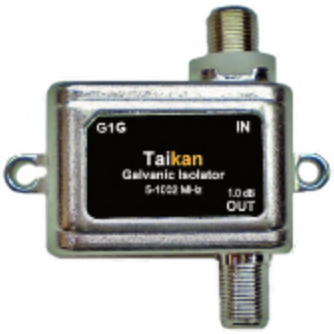
Cable Products, Drop Passives

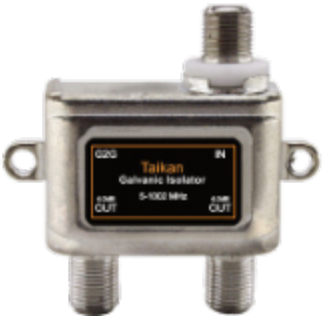
Taikan
ESTD. 1973

Description

Taikan's galvanic isolator series are used to separate the subscriber's network equipment from the CATV network system as well as protect the network equipment from electrical hazards (i.e. voltage surges or lightning).

It is an effective and practical solution to prevent various types of hazardous surges from damaging Customer Premise Equipment (CPE).





Features

- Class A - CENELEC EN50083-2 (Screening Effectiveness)
- EN/IEC 60728-11:2010 (Safety Requirements)
- 5-1002 MHz Bandwidth
- 1-, 2-, and 3-Port Splitter Design (1-Port Tubular Design Available)
- Protection for Subscriber's Premise Network Equipment Against Power Surges and Variabilities in Local Currents
- Superior Isolation and Return Loss for Return Path
- 2 kV DC Double Isolation Protection
- IEEE C62.41-1991 Category A3 Ring Wave, 6kV, 200A on All Ports
- Standard Contact Pins
- Compact Design with Zinc Alloy Die-cast Housing & Tin Plated Soldered Back
- Two Ground Screws Available
- CE & RoHS Compliant

General Specifications

Voltage Isolation:	2 kV DC
F Connector:	SCTE Compliant IPS-SP 400
Operation Temperature:	-40 to 60 °C (-40 to 140 °F)
RFI Shielding:	-120 dB
Impedance:	75 Ohms

Ordering Information

G [X] G - [X]

- [X] (after G): *1-, 2-, or 3-Port*
- [X] (after -): *T for Tubular Housing (Leave Blank for Standard Housing)*

Model Number	Inner Box	Standard Carton	Carton Weight
G1G	30 pcs	300 pcs	20 kg / 44 lbs
G2G	30 pcs	300 pcs	21 kg / 46 lbs
G3G	30 pcs	300 pcs	22 kg / 48 lbs
G1G-T	30 pcs	300 pcs	20 kg / 44 lbs

CE RoHS compliant

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Drop Passives - GxG

Insertion Loss

Frequency	G1G One Port Typ	G1G One Port Max	G2G Two Port Typ	G2G Two Port Max	G3G Three Port Typ	G3G Three Port Max	G3G Three Port Typ	G3G Three Port Max	G1G-T † One Port Typ	G1G-T † One Port Max	
5-10 MHz	0.1	0.6	3.3	3.7	3.2	3.7	6.8	6.9	0.1	0.6	dB
10-40 MHz	0.1	0.4	3.3	3.9	3.3	3.9	6.6	6.9	0.1	0.4	dB
40-470 MHz	0.2	0.4	3.3	3.9	3.3	3.9	6.8	7.0	0.2	0.4	dB
470-862 MHz	0.4	0.7	4.0	4.3	3.9	4.3	7.0	7.5	0.4	0.7	dB
862-1002 MHz	0.4	0.7	4.3	4.4	4.2	4.4	7.8	8.0	0.4	0.7	dB

Input/Output Return Loss

Frequency	Min	Typ	Min	Typ	Min	Typ	Min	Typ	
5-10 MHz	18	18	18	18	18	18	18	18	dB
10-470 MHz	18	20	18	20	18	20	18	20	dB
470-862 MHz	18	20	18	20	18	20	18	20	dB
862-1002 MHz	18	20	18	20	18	20	18	20	dB

Isolation Out to Out

Frequency	Typ	Min	Typ	Min	Typ	Typ	
5-10 MHz	x	20	25	20	25	x	dB
10-470 MHz	x	20	25	20	25	x	dB
470-862 MHz	x	22	25	22	25	x	dB
862-1002 MHz	x	20	22	20	22	x	dB

Screening Effectiveness*

Frequency	Typ	Typ	Typ	Typ	
5-10 MHz	85	85	85	85	dB
10-300 MHz	85	85	85	85	dB
300-470 MHz	80	80	80	80	dB
470-1002 MHz	75	75	75	75	dB

Intermodulation p+q**

	Max	Max	Max	Max	
After 25 V Surge	-120	-110	-110	-120	dB
After 1 kV Surge	-120	-110	-110	-120	dB

Galvanic Isolation

		Max
2120 VDC***	Inner Conductor (Input Port) to Inner Conductor (Output Port)	0.7 mA RMS
2120 VDC***	Outer Conductor (Input Port) to Outer Conductor (Output Port)	0.7 mA RMS
230 VAC****	Inner Conductor (Input Port) to Inner Conductor (Output Port)	2.0 mA RMS
230 VAC****	Outer Conductor (Input Port) to Outer Conductor (Output Port)	2.0 mA RMS

Notes:

* 5-30 MHz (Transfer Impedance Method According EN-60728-2)
30-1002 MHz (Absorption Clamp Method According EN-60728-2 Sec 4.4)

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

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

**** EN-60728-11/10 Safety Requirements: 230 VAC, I = ≤ 2.0 mA (0 to 25 °C)

† Class A Certification Pending