

Double galvanic isolators

5 – 1.800 MHz in F-technique; DGIS-1-SET

22380023
DGIS-1-SET, isolator



22380023
DGIS-1-SET, cover



- Protection of subscribers premise network equipment against electrical hazards caused by power surges, lightnings and variabilities in local currents
- 5 – 1.800 MHz bandwidth
- Double galvanic isolation acc. to IEC/EN 60728-11:2019-02 point 10
- Surge immunity according to IEC 61000-4-5 level 2
- Intermodulation resistance acc. to EN 60728-4 and UM TS 414
- Screening according to EN 50083-2 Class A +10 dB (30 – 1.800 MHz)
- All mounting holes with hole spacing Nx5 mm

- Housings with 12,5 mm distance between the axis of F-connector and the metal plate surface plus clearance of 7,5 mm for cable management underneath the body
- 1 GND block with screw for 6 mm² GND wire
- Compact housing design with CuSn white bronze plating, F-female connectors acc. to IEC/EN 61169-24 (Ø 9,45 ± 0,05 mm)
- DGIS-1-SET including plastic protection cover, material ABS, color RAL9010, dimensions 140 x 60 x 36 mm (H x W x D)

Parameter	Frequency [MHz]	DGIS-1-SET
Insertion loss [dB max.]	5 – 10	0,2 + 0,2
	10 – 40	0,2 + 0,2
	40 – 204	0,2 + 0,2
	204 – 258	0,2 + 0,2
	258 – 470	0,2 + 0,2
	470 – 862	0,3 + 0,2
	862 – 1.006	0,3 + 0,2
Return loss [dB min.]	1.006 – 1.218	0,4 + 0,2
	1.218 – 1.800	0,5 + 0,3
Return loss [dB min.]	All ports	
	5 – 10	16
	10 – 47	18
	47 – 1.800	18*
Intermodulation distortion ⁽¹⁾ all ports (acc. to EN 60728-4 and UM TS 414)		
	After 25 VDC surge (1,2/500µs)	0 dBµV / -120 dBc
	After 1 kV surge (1,2/50µs)	0 dBµV / -120 dBc
	After 150 VDC surge	0 dBµV / -120 dBc
Galvanic isolation ⁽²⁾	2120 V DC	≤ 0,7 mA during 1 minute (inner conductor input port to inner conductor output port)
	2120 V DC	≤ 0,7 mA during 1 minute (outer conductor input port to outer conductor output port)
	230 V AC	50 Hz / 60 Hz: ≤ 2,0 mA RMS (inner conductor input port to inner conductor output port)
	230 V AC	50 Hz: ≤ 2,3 mA typ. / ≤ 3,2 mA max. 60 Hz: ≤ 2,8 mA typ. / ≤ 3,8 mA max. (outer conductor input port to outer conductor output port)
Operation temperature [°C]		-25 ... +60
Order No.		22380023

* From 94 MHz with -1,5 dB/oct., but min. 12 dB

⁽¹⁾ Test setup: 2 combined test signals applied at one output port @ 120 dBµV

Test 1: with 2 signals f1 @55,25 MHz + f2 @61,25 MHz - IM harmonics measured at 2xf1 + f1+f2 + 2xf2

Test 2: with 2 signals f1 @193,25 MHz + f2 @199,25 MHz - IM harmonics measured at 2xf1 + f1+f2 + 2xf2

⁽²⁾ According to EN 60728-11:2019-02 point 10: at 2120 VDC ≥ 1 minute, leakage current ≤ 0,7 mA;
at 230 VAC 50/60 Hz, Leakage current ≤ 8,0 mA RMS (inner to inner conductor and outer to outer conductor),
test environmental temperature 0°C – 25°C



Mounting position
of the DGIS-1-SET
(transparency only for illustration)