

Semiconductor Switch HLS2-6G/UHI-TTL0

MTS-No.: 27540-01

Description

The Semiconductor Switches of this series are designed to work between 100 MHz and 6000 MHz. They cover for example GSM, DECT, UMTS, Bluetooth, WiMAX, Wi-Fi (2.4G / 5G) and all LTE frequency bands.

These units are ultra-high isolation absorptive RF switches. They can easily be controlled by TTL interface.



Technical data:

1 RF-specifications:

1.1	Switch type	HLS2, 2-way absorptive		
1.2	Impedance	50 Ω		
1.3	Input power	30 dBm max.		
	@ common port	22 dBm max. (terminated)		
	@ output ports			
1.4	Frequency range	100 - 6000 MHz		
1.5	Switching time	<10 μs typ.		
		min.	typ.	max.
1.6	VSWR		1.3	1.6
1.7	Insertion loss			
	@ 100 MHz		1.9 dB	2.5 dB
	@ 3000 MHz		2.9 dB	3.5 dB
	@ 6000 MHz		3.4 dB	4.0 dB
1.8	IL derating / 200 MHz		0.05 dB	
1.9	Isolation			
	@ RFC/RFX-RFX			
	@ 100 - 3000 MHz	110 dB	130 dB	
	@ 3000 - 6000 MHz	100 dB	120 dB	

2 Connections:

2.1	RF-in- and outputs	3x SMA female
2.2	Control connectors	2x 12 pole male (IN & OUT), type SMC Erni

3 General specifications:

3.1	Internal voltage (TTL)	5 VDC ±5 %
3.2	Power consumption	20 mW max.
3.3	Control interface	8 bit for data (a1, b1, a2, b2, a3, b3, a4, b4), TTL
		Up to four HLS2 can be controlled in series with one cable. The first HLS2 uses a1 and b1 and so on.
3.4	Operating temperature	-40 °C - +85 °C
3.5	Storage temperature	-55 °C - +150 °C
3.6	Reference temperature of specifications	+25 °C
3.7	Dimensions (without connections)	56 mm x 58 mm x 12.4 mm (LxWxH)
3.8	Case style	Milled aluminium enclosure
3.9	Colour	SurTec650 (Chrome alloy)
3.10	Weight	100 grams

4 Delivered parts:

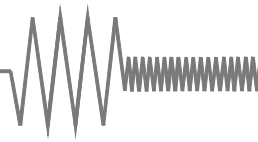
HLS2-6G/UHI-TTL0
Datasheet

5 Comments:

Warranty	12 months
RoHS-compliant	Yes

6 Recommended accessories:

RF-cables
Controller card for HLS2



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Typical measurements:

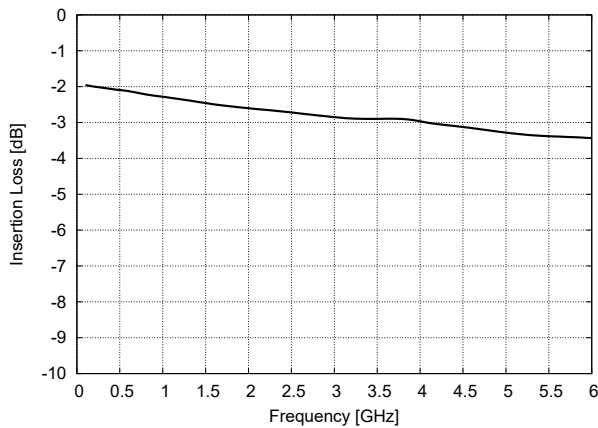


Fig. 1: Input port to output port insertion loss

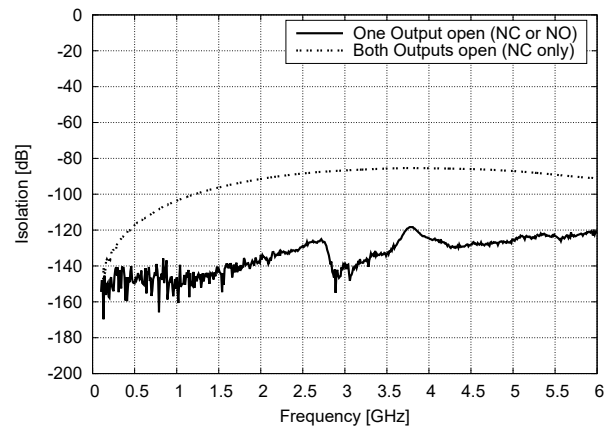


Fig. 2: Isolation between in- and output ports (RFC-RFX)

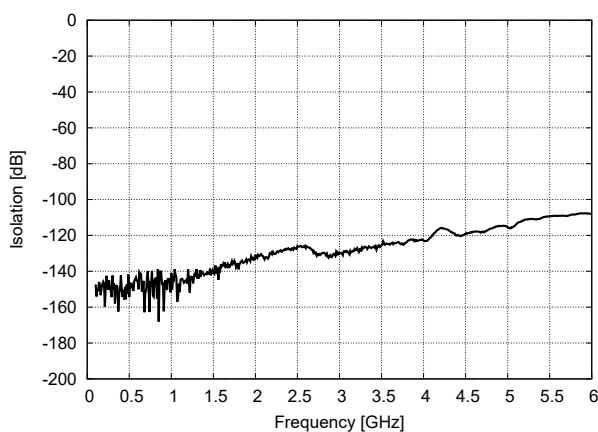


Fig. 3: Isolation between output ports (RFX-RFX)

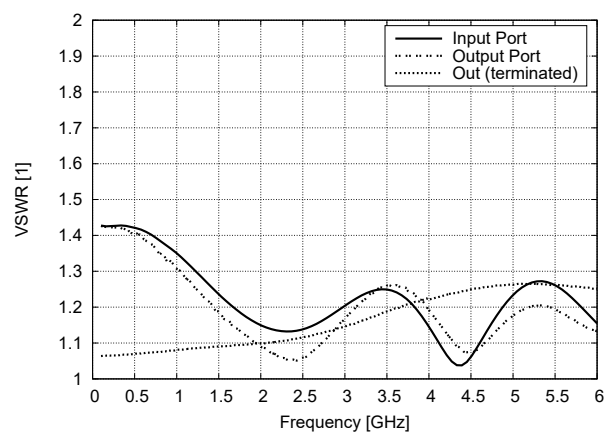


Fig. 4: VSWR for input and output ports

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Views:

