

Filter module USB 3.1 Gen 1 FIL-USB-3.1-A-MSB

MTS-No.: 26898-01

Description

The filter module USB 3.1 is designed for built in our MTS shielding boxes series MSB. It supports "SuperSpeed and Hi-Speed" and is designed for testing mobiles, tablets or similar devices with high data rates under shielded conditions. The shielding efficiency is more than 80 dB¹⁾ up to 6000 MHz. Passive and active filter elements are included.

The connectors are USB 3.0 type A socket. Very low power consumption with no V_{bus} tapping.



Technical data:

1 Specifications:

1.1 Supported standards	USB 1.x, USB 2.0, USB 3.1 Gen 1
1.2 Gross data rates	
@ USB 1.0	12 Mbit/s typ. (1.5 MB/s)
@ USB 2.0	480 Mbit/s typ. (60 MB/s)
@ USB 3.1	5 Gbit/s typ. (625 MB/s)
1.3 Shielding efficiency ¹⁾	
@ Supply pins	80 dBm min.
@ USB interface	80 dBm min.
1.4 Supported current rating on the USB interfaces	1.5 A typ.
1.5 Electrostatic protection USB interfaces	2 kV max..
1.6 Pinning USB interface	
@ Pin 1	Vbus 5 VDC
@ Pin 2	D- Data USB 2.0
@ Pin 3	D+ Data USB 2.0
@ Pin 4	GND Ground
@ Pin 5	USB3_RX- Data USB 3.1
@ Pin 6	USB3_RX+ Data USB 3.1
@ Pin 7	GND Ground
@ Pin 8	USB3_TX- Data USB 3.1
@ Pin 9	USB3_TX+ Data USB 3.1
1.7 Supply	No Vbus tapping

2 Connections:

2.1 In- and outputs	2x USB 3.0 type A sockets
2.2 Supply connectors	feed through filter and ground pin

3 General specifications:

3.1 Supply voltage	+4.0 VDC - +5.5 VDC
3.2 Supply voltage without damage	-0.3 VDC - +6 VDC max.
3.3 Power consumption	420 mA typ., 600 mA max.
3.4 Operating temperature	-20 °C - +50 °C
3.5 Storage temperature	-30 °C - +70 °C
3.6 Reference temperature of specifications	+25 °C
3.7 Dimensions (without connections) (LxWxH)	71 mm x 27.3 mm x 31 mm
3.8 Case style	Milled aluminium enclosure
3.9 Colour	SurTec650 (Chrome alloy)
3.10 Weight	80 grams

4 Delivered parts:

FIL-USB-3.1-A-MSB
Datasheet

5 Comments:

Warranty	12 months
RoHS-compliant	Yes

6 Recommended accessories:

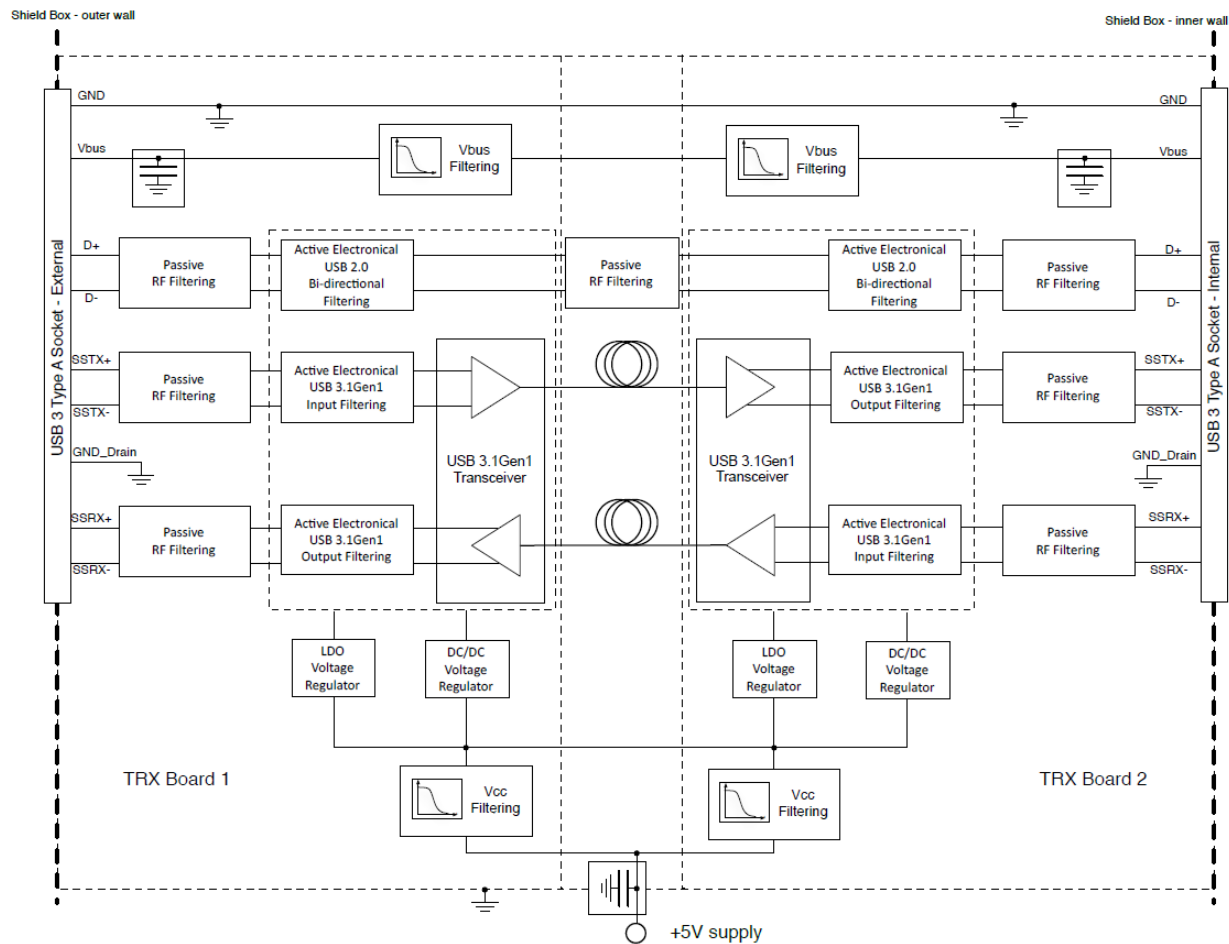
USB-cables

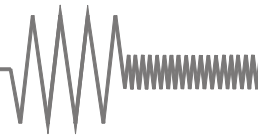
1) Shielding efficiency only guaranteed by built in a MTS shielding box series MSB up to frequency of 6000 MHz.

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Block diagram:





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Views:

