

Bias-T 40-3000MHz

BT-5 is outdoor current injector/extractor designed especially for wideband RF-systems. Low insertion loss and wide frequency range provide attractive possibilities for using of BT-5 in many applications.

Features:

- Wideband
- Low insertion loss
- Outdoor
- Compact and reliable
- Wide voltage range
- Widespread type of DC-input

Applications:

- Radio-monitoring
- Small signals receiving
- RF/IF-systems



RF characteristics*

Frequency range	40-3000						MHz
IN/OUT impedance	50/50						Ohm
	40MHz	88MHz	500MHz	1000MHz	2000MHz	3000MHz	
Insertion loss	0.1	0.1	0.2	0.3	0.7	0.9	dB
VSWR IN	1.2	1.1	1.1	1.2	1.4	1.4	dB
VSWR OUT	1.2	1.1	1.1	1.2	1.4	1.4	dB

* Measured at temperature T=+25°C

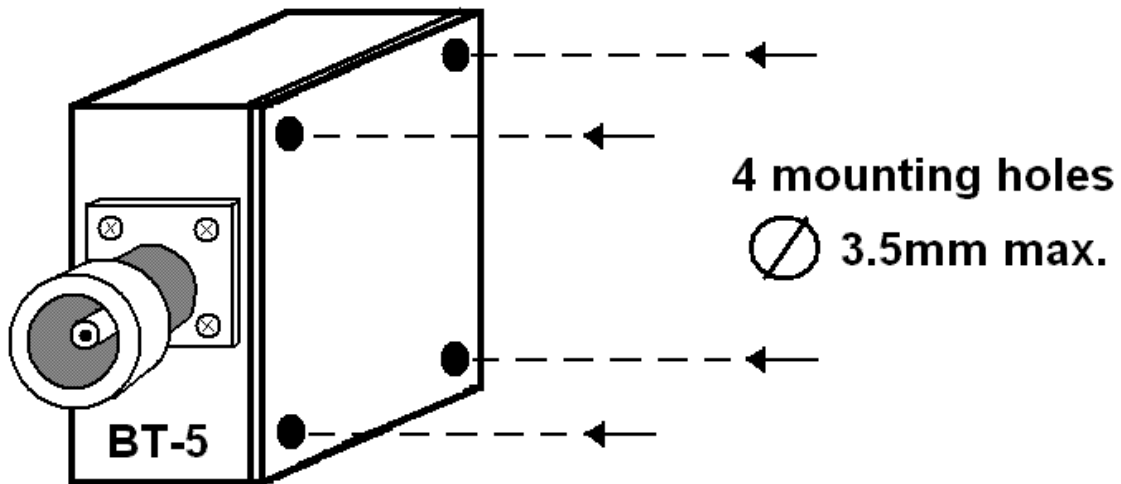
DC and mechanical characteristics

Operating voltage (DC)	+5...+12	V
IN/OUT Connector	N-type female/ N-type female	
Enclosure type	Outdoor, aluminium	
Mounting	Suitable for mounting onto flat surface	
DC input	2.1mm input, positive is on central pin	
Dimensions (without mounting clip)	73x49x22	mm

Absolute maximum ratings

Operating current	300	mA
Input voltage	+17	V
CW RF input power	2	W
Operating temperature	-40...+85	°C

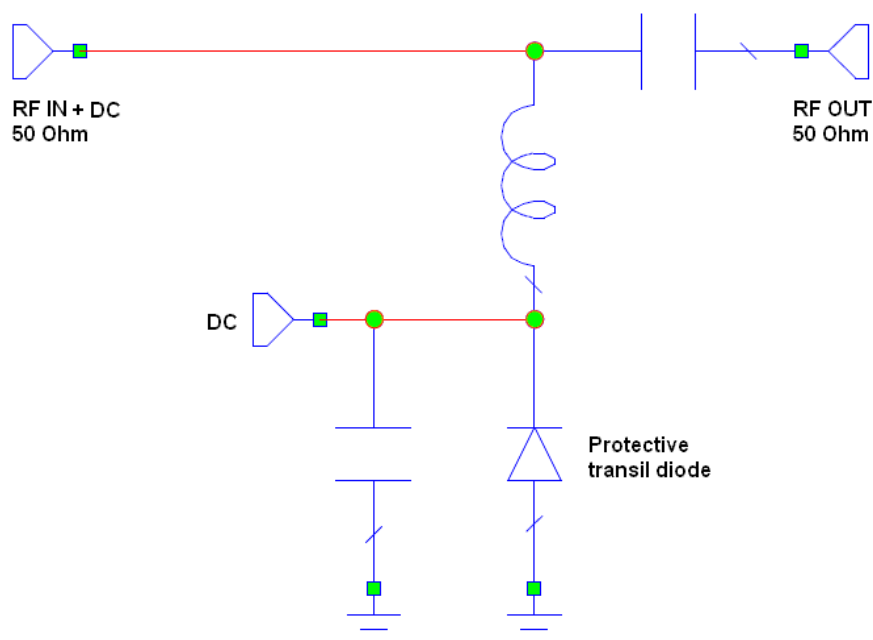
Mounting and installation instructions



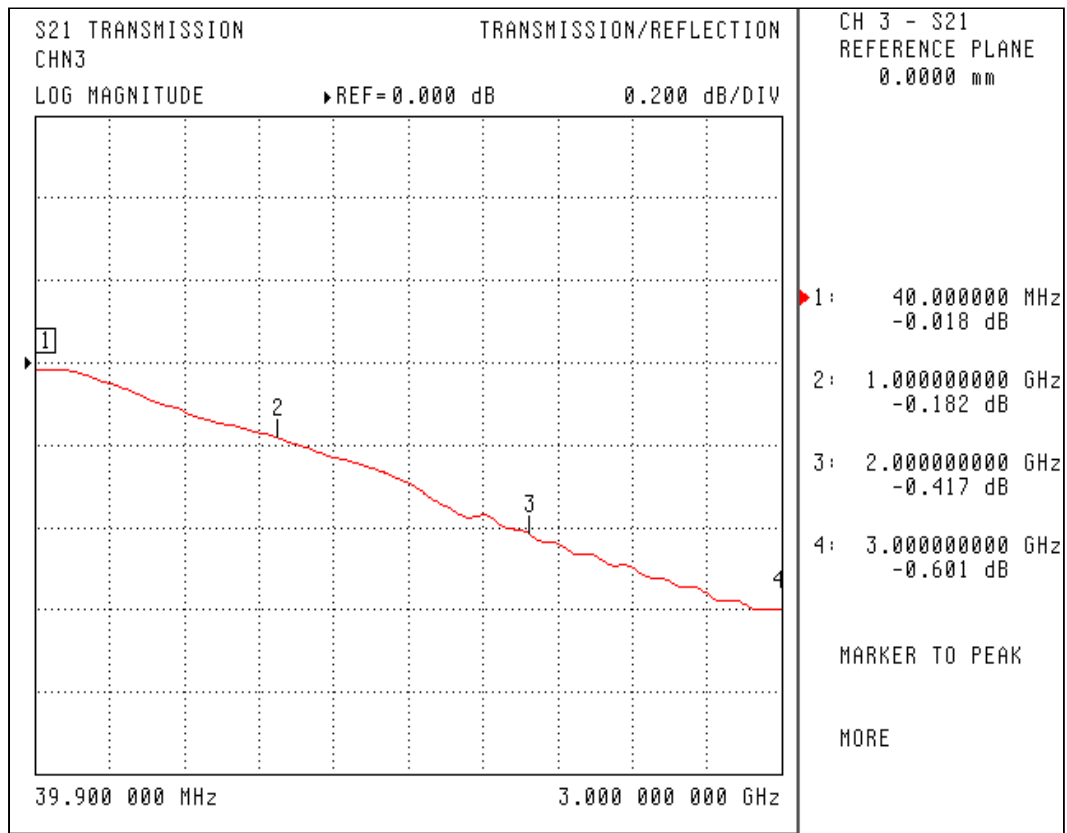
BT-5 can be mounted through four 3.5mm diameter holes, using suitable screws (as example M3x30) or other proper tools.

After connecting DC-plug into BT-5 the sum of RF and DC signals must appeared on RF IN+DC. At the same time on RF OUT pure RF signal can be found only. Actually RF signal direction between RF IN+DC and RF OUT is not important. Also direction of current between RF IN+DC and DC is not specified. Therefore BT-5 can be usable in both ways as current injector and current extractor.

Principal circuit diagram of BT-5



Example of BT-5 transfer function curve



S21 = (-1) * insertion loss