

SRF 1750/ABT
SRF1750AF1K000
RF A/B Terminating Switch

General Description:

Based on Quintech's proprietary L-Band switching technology, the SRF1750AF1K000 provides a conventional solution for switching between vertical and horizontal polarities. The SRF1750AF1K000 is a terminating A/B switch that operates in the 50-1750 MHz frequency range. Signal flow is controlled by a single contact closure. Power and control functions are applied via feed-thru studs. Its compact aluminum enclosure allows for mounting ease and flexibility. Multiple units can be conveniently integrated into a single rack mount enclosure, thereby maximizing limited rack space. Inputs and outputs are DC blocked.

Note: The SRF1750AF1K000 is a bidirectional switch. The connectors labeled "INPUT" may be used as outputs and the connector labeled "OUTPUT" may be used as an input.

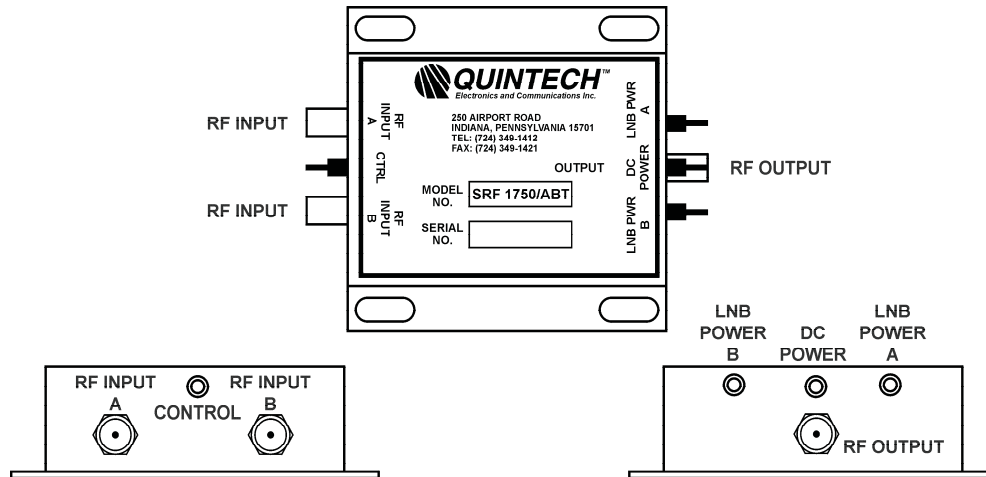
Specifications:

Input Ports:	1 (2 if reversed)
Output Ports:	2 (1 if reversed)
Frequency:	50-1750 MHz
Impedance:	75 Ω
Max. Operating Power:	1 W (+30 dBm)
Insertion Loss:	1.5 dB \pm 0.5 dB
Frequency Response:	\pm 1 dB
Isolation:	45 dB
Input Return Loss:	12 dB
Output Return Loss:	13 dB
RF Connectors:	F-Type, 75 Ω
Power Requirements:	18-24 V $\overline{\text{---}}$, @ 40 mA
Mechanical:	3.25"H x 3.25"W x 1.25"D
Certifications:	CE



Special Instructions:

The SRF1750AF1K000 is a terminating A/B switch that operates in the frequency range 50-1750 MHz. Signal flow is controlled by a single contact closure. All RF connections are made via 75 ohm F-Type connectors. Power and control functions are applied using feed-thru studs. Refer to the figure below for instructions regarding the connection and use of the SRF1750AF1K000 switch.



Note: The SRF1750AF1K000 is a bi-directional switch, therefore the connectors labeled "INPUT" may be used as outputs. Likewise, the connector labeled "OUTPUT" may be used as an input.

Begin by connecting the RF inputs and output to the proper F-Type connectors on the SRF1750AF1K000. The default signal path is between RF INPUT A and OUTPUT.

Next, determine where power for the switch is coming from and to where it will be routed. Power should always be present at the DC terminal, either via the center conductor of the coaxial cable on the OUTPUT F-Type connector or by powering externally via the DC terminal. A required voltage of +18 to +24 VDC at 40 mA is required for the switch. If DC power must be present at RF INPUT A, for LNB power, a jumper wire should be connected between DC POWER and LNB PWR A. If DC power must be present at RF INPUT B, for LNB power, a jumper wire should be connected between DC POWER and LNB PWR B. Power may be passed from OUTPUT to both INPUTS by connecting all three DC terminals.

In order to change routing of the RF signal from its default, the terminal labeled "CTRL" must be grounded. The device used to ground this terminal must be capable of sinking approximately 40 mA of current. Grounding this terminal will route the RF signal between RF INPUT B and OUTPUT. Releasing the CTRL terminal will return the switch to its original position.

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