



6 - 18GHz Switch Multiplexer

The Switch Multiplexer is a single RF input to single RF output, fast, multi-configurable filter bank covering 6 - 18GHz.

Consisting of 12 channels (6 - 18GHz), these are equally spaced 1GHz channels. Each channel is independently controlled, allowing 4096 possible combinations of overall filter response from input to output, with the capability of changing from any combination, to any other in less than 100ns.

This provides the user with a fast, flexible, filter network capable of providing different band-pass or band-stop responses on a pulse-by-pulse basis in dense signal environments.

Filter control is achieved by 12 bit parallel low voltage TTL on VME control bits.

With internal amplification, providing zero loss and low noise figure, together with flat insertion loss and exceptionally flat group delay, the filter is an ideal system enhancement.

Designed to withstand harsh military environments, the SA009 is a complete front-end filter solution allowing system designers to achieve functionality previously unattainable.

For further information, please contact the Sales Department.

FEATURES

- Full 6 – 18GHz
- 12 Channels
- Low Noise Figure
- Fast Switching

APPLICATIONS

- Broadband EW Signal limiting
- Adaptive filtering
- RWR system protection
- Test lab filtering

See restrictions on published datasheets at www.teledynedefence.co.uk/

SPECIFICATIONS

Parameter	Specification
Frequency	6 to 18GHz
Noise Figure	10dB max
Input p1dB	>0dBm
No of Channels	12
Channel Crossovers	6-7-8-9-10-11-12-13-14-15-16-17-18GHz
Band width reduction	When channels are deselected band edges reduce: 6-8GHz +/-250MHz 8-12GHz +/-300MHz 12 -18GHz +/-400MHz
Switching Speed	100nsecs
Control	12 bit parallel TTL on VME P2 connector
IL tracking across passband	1dB max
IL.variation	.025dB/deg C
Rejection	Band edge +/- 500MHz 30dB Band edge +/- 1GHz 50dB
VSWR (in/out)	2.5:1
Temperature	-40 to +85 deg C
DC Power	+12V 600mA -5V 150mA
Size	6U x 4HP VME Form factor
Mechanical	VME Form factor 6U x 4HP, single slot

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