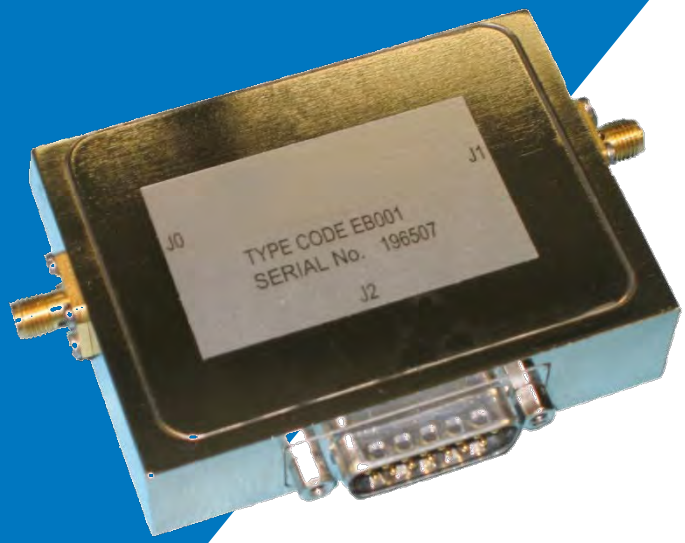
Tuneable Bandpass Filter

EB001



Tuneable Bandpass Filter

The EB001 electronically tuneable Band pass filter has been specifically designed to provide a cost effective means of accurately tuning a band pass filter over up to an octave bandwidth. Filter Control is achieved using 8 frequency control bits.

With low loss and flat group delay, the EB001 is an ideal choice for tuned super-heterodyne receivers containing analogue or digital signal data.

Designs are available up to 3GHz with user definable control interfaces.

Designed to withstand military environments, the EB001 is a complete filter solution for military communications and commercial users who wish to reject adjacent interfering signals in agile signal environments.

Please contact the sales team for further information.

FEATURES

- Full Comms. Bands Coverage
- Fast Tuning
- Electronically Tuneable
- Low Insertion Loss
- 8 Bit Digital Control 1MHz Resolution

APPLICATIONS

- Tactical Communications

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SPECIFICATIONS

Pass band	225 – 450 MHz note 1
3dB bandwidth	25 MHz Maximum note 1
Insertion Loss	3 ±0.75 dB max over all tuned centre frequencies across the entire tuning range
Group Delay Variation	< 10 nsec (Fo-2%) to (Fo+2%) where Fo = tuned frequency
2nd harmonic Rejection	60 dBc min note 2 & 3
1dB Compression (inband)	>+30 dBm note 2 & 3
T.O.I. (Inband)	>+40 dBm (input)
Tuning Control	8 bit parallel
Tuning Speed	35 microsecs
Input / Output Impedance	50 Ohm, standard SMA (f)
VSWR @ Fo	1.5:1
Operating Temperature Range	-30 to +85 degrees C
Storage Temperature Range	-50 to +85 degrees C
DC power	+5V DC at <500mA -12V to -40V DC at <1mA note 2
Size	75 x 30 x 20 mm

NOTES:
1. Other frequency options are available.
2. Specified performance with a –40V Bias. Option also available for –40V source to be generated internally.
3. The linearity of the filter is directly affected by the negative bias supplied to the unit. As, standard, the unit has a P1dB (input) of +10dBm for –12V bias. Increasing the bias to –50V, the linearity and P1 will also increase to 30dBm (Input).

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