



OMEGA TYPE ETB-77 Experimental Training Board has been designed specifically to study characteristics of various types of Active Filters. This Training Board includes low pass, high pass, band pass and notch filters. The filter circuits are designed using second order Butter worth polynomials and provide unity gain in the pass band.

Practical experience on this board carries great educative value for Science and Engineering Students.

OBJECT

To study characteristics of various Active Filters.

01 LOW PASS FILTER

- 1.1 Upper Cut-off frequency : 1 KHz
- 1.2 Cut-off slope : 29.5 dB/decade
- 1.3 Input impedance : 3.5 K at 1KHz
- 1.4 Output impedance : 18 Ohms at 1KHz

02 HIGH PASS FILTER

- 2.1 Lower cut-off frequency : 100 Hz
- 2.2 Cut-off slope : 26 dB/decade
- 2.3 Input impedance : 12 K at 100 Hz
- 2.4 Output impedance : 30 Ohms at 100 Hz

03 BAND PASS FILTER

- 3.1 Upper cut-off frequency : 1 KHz
- 3.2 Lower cut-off frequency : 100 Hz
- 3.3 Upper cut-off slope : 29.5 dB/decade
- 3.4 Lower cut-off frequency : 26 dB/decade
- 3.5 Input impedances : 24 K at 100 Hz , 3.5K at 1 KHz
- 3.6 Output impedances : 30 Ohms at 100 Hz, 27 Ohms at 1 KHz

04 NOTCH (BAND REJECT) FILTER

- 4.1 Notch frequency : 1 KHz
- 4.2 Input impedance : 15 K at 1 KHz
- 4.3 Output impedance : 25 ohms at 1 KHz
- 4.4 Notch width : 100 Hz

FEATURES

The board consists of the following built-in parts :

- 01 $\pm 12V$ DC at 50mA, IC regulated Power Supply internally connected.
- 02 Four Operational Amplifier ICs.
- 03 Adequate no. of other electronic components.
- 04 Mains ON/OFF switch and Jewel light.
- 05 The unit is operative on 230VAC $\pm 10\%$ at 50Hz.
- 06 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 50cm.
- 07 Good quality, reliable terminal/sockets are provided at appropriate places on panel for connections/ observation of waveforms.
- 08 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
- 09 Weight : 2.100 Kg. (Approx.)
- 10 Dimension : W 340 x H 125 x D 210

OTHER APPARATUS REQUIRED:

- 01 AF Generator OMEGA TYPE AO-300.
- 02 A.C. Millivoltmeter OMEGA TYPE ACV-25

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

OMEGA ELECTRONICS