Communications



Experiment setup for filter and oscillator circuits

hps SystemTechnik offers a training system consisting of the Module System, a Universal Assembly Board and several additional components which is ideal for conducting all experiments in the entire field of filter and oscillator technology.



A closer look at three of the modules:

- Digital filter

17 / 14 V02 Technical changes without prior notice!

- Quartz, 2 MHz
- Oscillator coil

- Universal module system for filter and oscillator technology
- Experiments from passive filters to digital filters possible
- Includes all common oscillator circuits
- Detailed experiment instructions with solutions



Module System Filter and Oscillator Circuits

Series 4075

Possible Experiments

Excerpt from the experiment manual: "Filter and Oscillator Circuits" (Type V 0136)

Passive filters

- Low and high pass with RC element
- Parallel and series resonant circuit with LCR element

Active filters

- Low pass 1st to 4th order
- High pass 1st to 2nd order
- 2nd order band pass and band pass with variable quality
- Notch filter
- All-pass filter

Digital filters

- Low pass, band pass, notch filter (2nd order)
- Band pass in cascade circuit and with variable quality

Oscillators

- Quartz, CMOS, Meissner, Hartley, Colpitts oscillators

Tel.:

Fax:

Web:

E-Mail:

- Voltage/frequency converter
- Astable multivibrator
- RC generator with operational amplifier
- Squarewave/delta generator
- Sawtooth generator





Module System Filter and Oscillator

The modules are plugged to

The respective slots are la-

belled with the appropriate

Circuits

Series 4075

a storage board.

symbols.

Communications

1 set of modules (Type 4075)

1k0 1040 1,8k 10 k 68K 12 1 2,2k0 2.2 k 2 W 3.3 k 2 W 5.6k 6.8 k 68k N B INV 8.2k 8.2 k 39k

Technical data for the modules of the Filter and Oscillator Circuits

Mechanical data

The module housings consist of a top part made of a rugged transparent plastic and a rugged bottom part made of black, glass-fibre reinforced plastic. The top and bottom parts are joined by two snap locks which enable the housing to be opened quickly and easily.

Up to 6 lamella plugs for wiring and plugging the modules into the boards are located in the bottom of the housing depending on the type.

White printed circuit symbols indicate the module functions.

Other technical data

- Housing dimensions: 56 x 75 x 35 mm / 38 x 56 x 35 mm / 38 x 19 x 35 mm (w x d x h)
- Plug diameter: 4 mm (arranged in a 19 mm grid)

Storage board for the modules

- 5 mm thick laminated board, blue in colour with white engraving
- Dimensions: 266 x 297 x 130 mm (w x d x h) / weight: 2 kg (with modules)

Subject to technical modifications

