



MEASUREMENT h, y & z PARAMETER OF JUNCTION TRANSISTOR IN CE MODE AT DIFFERENT EMITTER CURRENT VALUE, MODEL – H – 02.

This experimental board on Transistor h – parameter measurement consists of two continuously variable, regulated and short-circuit proof Power Supplies required for the measurements. These power supplies, termed as V_{BB} and V_{CC} , are located in the lower half of the board alongwith their control knobs.

A commonly available P.N.P. Ge Transistor has been provided for parameter study. The h-parameter measurement require the creation of proper open-circuit of short-circuit conditions, for AC at input/output ports. Proper chokes, capacitors and switches have been provided for this. An additional facility of study of the variation of h parameters with VCE and IC exists. Measurement of y or z parameters is also possible on the board.

A ON / OFF switch with indicating lamp is provided. The layout on the board is quite spread out to facilitate convenient working and clear understanding. Patch cords suitable to the terminals are supplied with the board for easy inter – connections and longer working life of the terminals.

Circuit is engraved and components are mounted on the top of the decorated sunmica bakelite sheet to give better and clear understanding. A complete working manual containing theory, circuit details and operating instructions, is supplied with the experimental board.

EXPERIMENTS:

- 1. To measure the h-parameters of a given transistor at 1, KHz.
- 2. To study the variation of h parameters with VCE and IC.

OTHER APPARATUS REQUIRED:

- 1. A General purpose C.R.O.
- 2. Audio Frequency Oscillator, Model 712.
- 3. True RMS A.C. Millivoltmeter, Model ACM 536. (with builtin 1 KHz Oscillator)
- 4. 0 100, μ Amp. D.C. Microammeter.

01 No.

5. 0-15, mAmp. D.C. Milliammeter.

01 No.

6. 0-25, Volt D.C. Voltmeter.

01 No.