

# Transistor Analyzer Scientech 2321



**Scientech 2321 Transistor Analyzer** provides the facilities for Transistor Static Test and Curve Tracing. These two are generally the most conventional tests used in laboratories. It is designed to show the complete arrangements of all the test methods and procedures. Scientech 2321 is a comprehensive solution for study of Transistor Testers and Testing of Transistor both. It supports both NPN and PNP transistors.

### **Features**

- Single platform covers important Transistor tests
- On-board Curve Tracer circuit
- Comprehensive test circuit schematics shown over mimic
- Onboard micro-ammeter for low current measurement
- Onboard NPN /PNP selection for each test
- Built-in DC Power Supply
- Transistor Tests Supported are:
  - Short Circuit test for NPN /PNP Transistor
  - Open Circuit test for NPN / PNP Transistor
  - ICBO / I CEO test for NPN / PNP Transistor
  - HFE (DC) test for NPN / PNP Transistor
  - Common Emitter characteristics curve plotting
  - Determination of Transistor Parameters from CE characteristics

### • Transistor Curve Tracer :

- Shows IC vs VCE family of curve on Oscilloscope
- Support both NPN and PNP Transistor
- Control knobs for Amplitude, number of base steps and sweep frequency selection for curve tracing



# Transistor Analyzer

## Scientech 2321

### **Scope of Learning**

- Short Circuit test for NPN /PNP Transistor
- Open Circuit test for NPN / PNP Transistor
- $I_{CBO}$  /  $I_{CEO}$  test for NPN / PNP Transistor CBO CEO
- H<sub>FE</sub> (DC) test for NPN / PNP Transistor FE
- NPN Transistor C-E Characteristics curve tracing using Curve Tracer
- PNP Transistor C-E Characteristics curve tracing using Curve Tracer

## **Technical Specifications**

Step Frequency : 500 Hz - 4 KHz

Sweep Frequency : 500 Hz - 4 KHz

Collector sweep amplitude : 0 - 20 V No. of steps:0 - 16 steps (selectable)

Transistor Types : Only small plastic packages having power ratings below 500 mW

On board micro-ammeter :  $0 - 300 \mu A$  (moving coil type)

**Collector-base Supply** : ± 12 V max

**Emitter-base Supply** : ± 5 V max

**Test Points** : 16 nos

Interconnections : 2 mm socket

**Power Supply** : 230 V  $\pm$  10%, 50 / 60 Hz

**Power Consumption** : 5 VA approximately

**Dimensions (mm)** : W  $340 \times D 240 \times H 100$ 

Weight : 1.1 Kg approximately

Product Tutorial : Online on www.ScientechLearning.com

Included Accessories:

Patch cord 16" (2mm) : 4 nos.

NPN Test Transistors (2N 3904): 2 nos.

PNP Test Transistors (2N 3906): 2 nos.

Mains cord : 1 no.