

Measuring Static Characteristics of 3-terminal Semiconductor Devices

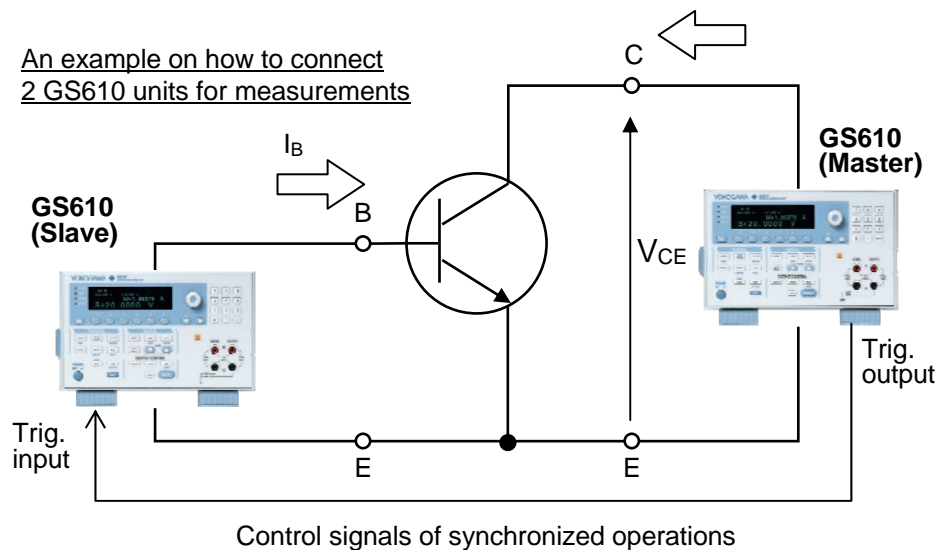
Application

Two GS610s are operated in sync to measure the static characteristics of a transistor. Constant h is then determined from the slope of each characteristics data. In the I_B - I_C characteristics measurement, a GS610 for base current I_B output and a GS610 for collector current I_C measurement are operated in sync to measure the characteristics. The V_{CE} - I_C characteristics measurement is possible by connecting one GS610 to another GS610 between the emitter and the collector, applying V_{CE} , and measuring the collector current I_C .

Solution Features

- Curve tracer function with multipurpose work sheets
- Less expensive than curve tracers (about one fourth the price)
- Curve tracer with max 110V and max 3.2A
- Basic voltage accuracy is $\pm 0.02\%$ and basic current accuracy is $\pm 0.03\%$
- No control software needed
- Easy to connect, easy to set up when operating multiple units in sync

An example on how to connect 2 GS610 units for measurements



- V_{CE} - I_C characteristics (h_{oe})
- I_B - I_C characteristics (h_{fe})
- V_{BE} - I_B characteristics (h_{ie})
- V_{CE} - V_{BE} characteristics (h_{re})

V-I Characteristics of Transistor

