

577D1/577D2
Curve Tracer System**FEATURES**

- Measures dc Parameters for 2 and 3 Terminal Devices
- Display Storage
- Up to 100 watts
- Lowest Price Curve Tracer System

APPLICATIONS

- Semiconductor R & D
- Production Device Testing
- Incoming Inspection
- Component Engineering Characterization

ORDERING INFORMATION

577D1 Storage Curve Tracer
Requires 177 or 178 **\$8,270**

577D2 Nonstorage Curve
Tracer Requires 177 or 178 **\$7,260**

OPTION

Opt. 10 - 10 x 10 graticule **+\$98**

TEST FIXTURES

177 Standard Test Fixture **\$1,710**

Includes: A1005 Axial diode lead adapter; A1007 transistor adapter; safety cover (337-1194-02); instruction manual (070-1436-00).

178 Linear-IC Test Fixture **\$4,130**

Includes: 16 DIP IC socket (136-0442-00); standard op-amp card (013-0149-02); interchangeable nomenclature panel for function switch (333-1770-00); instruction manual (070-1977-00).

577D1/D2 OPTIONAL ACCESSORIES

Test Set Up Cards - Package of 250 (070-1639-01) ******

CRT Implosion Shield - Clear

For 577D1 Order 337-1440-00 **\$4.25**

Camera - C-5C **\$530**

See Instrumentation

Documentation Devices section

Cart - K213 **\$660**

Socket Adapters -

See Adapters section

178 OPTIONAL ACCESSORIES

2 Inch Patch Cord - Package of 1
Order 012-0200-00 **\$7.00**

TEST CARDS

Standard Op Amp - (included with 178) Order 013-0149-02 **\$260**

Hardware Op Amp -
Order 013-0150-02 **\$130**

Multiple Op Amp -
Order 013-0155-01 **\$750**

Positive Regulator -
Order 013-0147-00 **\$1,735**

Negative Regulator -
Order 013-0148-00 **\$1,545**

576/577 Data Sheet -
48W-3346-3 **NC**

APPLICATION NOTES

Testing 2N3904 - 48W-4021-1 **NC**

Testing 2N4441 - 48W-4020-1 **NC**

** Contact your local sales representative.

The 577D1 and 577D2 curve tracers with the Tektronix 177 plug-in adapter allow dc parameter characterization of transistors, thyristors, linear ICs, diodes, SCRs, MOSFETs, optoelectronic components, solar cells, solid state displays and other semiconductor devices. By selecting one of three application specific adapters with the 178 plug-in, expanded parameter measurements are available for linear op-amps, SCRs and three terminal regulators.

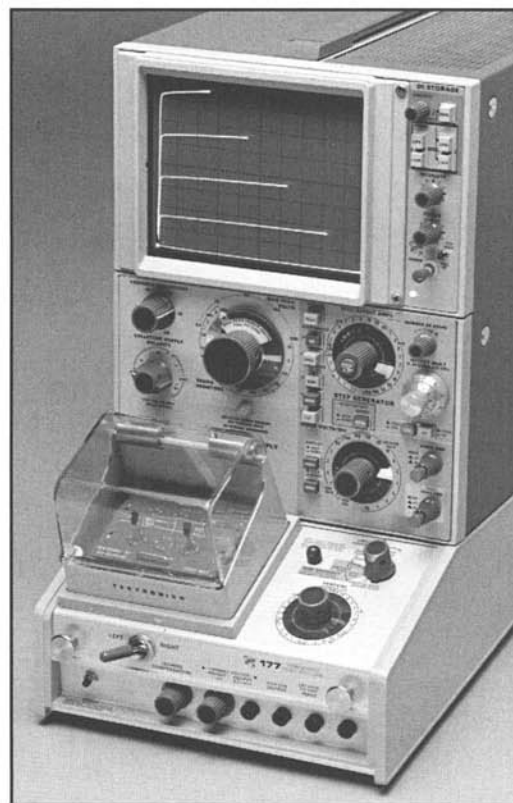
Typical measurements include leakage, breakdown voltages up to 1600 volts, MOSFET Vgs(th), SCR Vgt/Igt, Diode Vf, ZENER Vz/Vf, resistance as well as other dc parameters.

INTERACTIVE CONTROL

The 577D1 and 577D2 provide the same industry standard and familiar interactive manual controls available on Tektronix 370, 371 and 576. With interactive control, the curve tracer can provide refined characterizations on standard and unique devices for component engineering, research or design.

DISPLAY

The 165 mm (6.5 inch) rectangular display provides a 8x10-cm display with parallax-free, internal graticule. The 577D1 has a split screen storage display useful for comparison of two devices. The 577D2 has a non-storage display.

**CHARACTERISTICS**

Voltage Range	6.5 V	25 V	100 V	400 V	1600 V
Max Continuous Peak Current	10 A	2.5 A	.6 A	.15 A	.04 A
Peak Current Pulsed	20 A	5 A	1.25 A	.3 A	.08 A
Min. Series Res. (ohms)	.12	1.9	30	500	8 k
Max Series Res. (ohm)	8 k	120 k	2 M	8 M	8 M

COLLECTOR CURRENT

Measurement range is .2 nA/div to 2 A/div for collector current.

COLLECTOR/BASE VOLTAGE

Measurement range is 5 mV/div to 200 V/div for the collector and 5 mV/div to 2 V/div for base voltage.

STEP GENERATOR

The step generator has 0 to 95 steps, 5 nA to 200 mA in the current mode and 5 mV to 2 V in the voltage mode. Offset control is variable from -10 to +10X step amplitude. In pulsed mode, the step generator changes from stair step output to 300 μ s wide pulses.

TEST FIXTURING

The 577D1 and 577D2 require either the Tektronix 177 or 178 plug-in test fixture.

With the 177 plug-in, the 577D1 and 577D2 are standard curve tracer systems that can make traditional dc parametric measurements. Socket adapters for different device package styles are described in the socket adapter section.

The 577515E curve tracer system adds an SCR adapter to extend the 177 plug-in to measure turn-off time characteristics of SCRs for forward currents up to 5 amps.

With the Tektronix 178 plug-in, the 577D1 and 577D2 provide measurements at low currents for linear IC characterization. In addition to the 178, a test card and a device socket adapter must be selected.

Selection of standard, hardware, or multiple op-amp test cards with a 178 and a 577D1/D2 provides common op-amp measurements: \pm input current, offset voltage, CMRR, gain, \pm PSRR, - supply current and collector current. Four device socket adapters are available: 8 or 10 lead TO package and 14 or 16 pin dual in line packages.

With a positive or negative regulator card as well as the 178 and 577D1 or 577D2, three terminal regulator parametric measurements can be performed: output voltage, load regulation, line regulation, ripple regulation, quiescent and common-terminal current. Standard socket adapters with Kelvin sensing are described in the next section.