

# 6521 6522

10 channels of multiplex switching

Install directly in 6517A's option slot

Choose from low current scanning or high impedance voltage switching with low current switching

<200µV contact potential

<1pA offset current

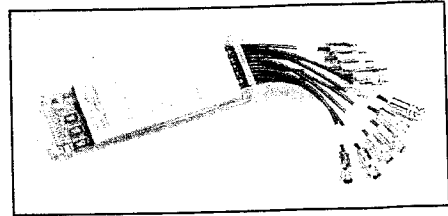
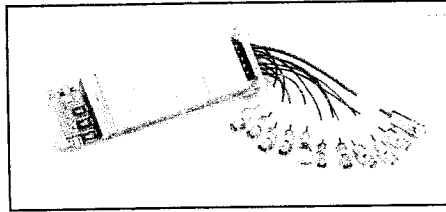
## Ordering Information

**6521 Low Current, 10-Channel Scanner Card (for Model 6517A)**

**6522 Low Current, High Impedance Voltage, High Resistance, 10-Channel Scanner Card (for Model 6517A)**

Extended warranty, service, and calibration contracts are available.

## Low Current, 10-Channel Scanner Cards for 6517A



Two optional 10-channel plug-in scanner cards are available to extend the measurement performance of the Model 6517A Electrometer/High Resistance Meter. The cards install directly into the option slot in the back panel of the Model 6517A.

The Model 6521 Low Current Scanner Card is a 10-channel multiplexer, designed for switching low currents in multipoint testing applications or when the test configuration must be changed. Offset current on each channel is <1pA and high isolation is maintained between each channel (>10<sup>15</sup>Ω). The Model 6521 maintains the current path even when the channel is deselected, making it a true current switch. BNC input connectors help provide shielding for sensitive measurements and make the card compatible with low noise coaxial cables. The Model 6521 is well suited for automating reverse leakage tests on semiconductor junctions or gate leakage tests on FETs.

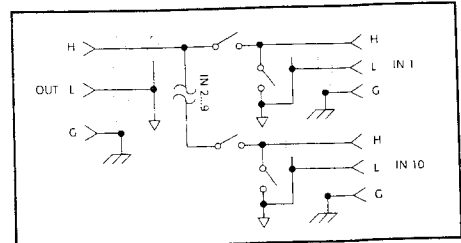
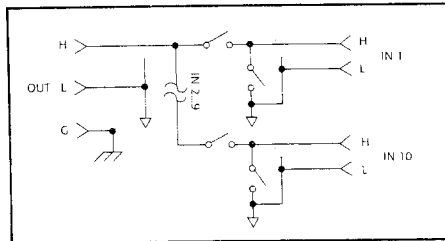
The Model 6522 Voltage/Low Current Scanner Card can provide up to ten channels of low-level current, high impedance voltage, high resistance, or charge switching. Although it is similar to the Model 6521 in many ways, the Model 6522's input connectors are 3-lug triax. The card can be software configured for high impedance voltage switching of up to 200V. Triaxial connectors make it possible to float the card 500V above ground and drive guard to 200V.

### MODEL 6521 SPECIFICATIONS

CHANNELS PER CARD: 10.  
 FUNCTIONS: Amps.  
 CONTACT CONFIGURATION: Single pole, "break-before-make" for signal HI input. Signal LO is common for all 10 channels and output. When a channel is off, signal HI is connected to signal LO.  
 CONNECTOR TYPE: Inputs BNC. Outputs Triaxial.  
 SIGNAL LEVEL: 30V 500mA, 10VA (resistive load).  
 CONTACT LIFE: >10<sup>9</sup> closures at maximum signal level; >10<sup>7</sup> closures at low signal levels.  
 CONTACT RESISTANCE: <1Ω.  
 CONTACT POTENTIAL: <200µV.  
 OFFSET CURRENT: <1pA (<30fA typical at 23°C, <60% RH).  
 ACTUATION TIME: 2ms.  
 COMMON MODE VOLTAGE: <30V peak.  
 ENVIRONMENT: Operating: 0°C to 50°C up to 35°C at 70% RH. Storage: -25°C to 65°C.

### MODEL 6522 SPECIFICATIONS

CHANNELS PER CARD: 10.  
 FUNCTIONS: Volts, Amps.  
 CONTACT CONFIGURATION: Single pole, "break-before-make" for signal HI input. Signal LO is common for all 10 channels and output. When a channel is off, signal HI is connected to signal LO. 6517A can also configure channels as voltage switches.  
 CONNECTOR TYPE: Inputs: Triaxial. Outputs: Triaxial.  
 SIGNAL LEVEL: 200V 500mA, 10VA (resistive load).  
 CONTACT LIFE: >10<sup>9</sup> closures at maximum signal level; >10<sup>7</sup> closures at low signal levels.  
 CONTACT RESISTANCE: <1Ω.  
 CONTACT POTENTIAL: <200µV.  
 OFFSET CURRENT: <1pA (<30fA typical at 23°C, <60% RH).  
 CHANNEL ISOLATION: >10<sup>15</sup>Ω, <0.3pF.  
 INPUT ISOLATION: >10<sup>15</sup>Ω, <125pF (Input HI to Input LO).  
 ACTUATION TIME: 2ms.  
 COMMON MODE VOLTAGE: <300V peak.  
 ENVIRONMENT: Operating: 0°C to 50°C up to 35°C at 70% RH. Storage: -25°C to 65°C.



1.888.KEITHLEY (U.S. only)

A GREATER MEASURE OF CONFIDENCE

LOW LEVEL MEASURE & SOURCE