High Speed, Low Leakage Current Matrix

8x12

The Model 7174A Low Current Matrix Card is designed for semiconductor research, development, and production applications requiring high quality, high performance switching of I-V and C-V signals. The Model 7174A is ideal for use with Keithley Models 2635B and 2636B System SourceMeter® SMU Instruments, Model 4200-SCS, and the Agilent B1500. The card's configuration is 8 rows x 12 columns, with signal and guard switched at each crosspoint. Offset current has been reduced dramatically to <100fA on all pathways. Significant reductions in the level of parasitic capacitances in the Model 7174A help speed the process of making low level measurements.

The Model 7174A provides an optimum solution to switching the lower level signals common to today's semiconductor characterization tests. The card's low leakage and minimal dielectric absorption ensure that key device measurements can be performed many times faster than with current switching technologies. Connections are 3-lug triax with the outer shell connected to chassis for safety and noise shielding. The center conductor is fully surrounded by the inner conducting shield allowing fully guarded measurements to be made with higher isolation and improved speed and accuracy.

For applications that require making connections to a large number of devices or test points, the Model 7174A matrix can be expanded with additional cards. On-card connectors are provided to connect the rows (column expansion) between other 7174A cards in adjacent slots of the Model 707B switching mainframe. Eight female-to-female cards are provided with each 7174A to simplify expansion. Up to six 7174A cards can be connected in a single 707A switching mainframe to form an 8x72 or 12x60 matrix.

ORDERING INFORMATION

7174A 8x12 High Speed, Low Current Matrix

ACCESSORIES AVAILABLE

7174A-Y-EW 1-year factory warranty extended to 3 years from date of shipment