



Applied Test Resources

MATX4001 **High Speed Matrix Card**

The MATX4001 module is a general purpose-switching matrix, consisting of 40 relays arranged in 5 rows by 8 columns. Each row/column consists of independent Force/Sense lines that are switched simultaneously. Each relay is capable of handling 1 Amp and can isolate up to 5 KV. Each relay on the matrix is independently controlled with an On/Off command via software. Additionally, there are four lines that may be used to control relays on the DUT board. To use these lines, the positive side of the relay coil may be connected to the voltage needed (must be between 5 V and 24 V), and the other side of the coil is connected to the chosen line. Each line is controlled by an independent On/Off command from the software. Issuing an "On" command drives this line low, energizing the relay. Issuing an "Off" command drives this line high, turning off the relay.

SPECIFICATIONS

MATRIX SPECIFICATIONS*	
Number of Rows	5
Number of Columns	8
Number of Contacts per Matrix Point	2 – Force & Sense
Maximum Voltage	250 V
Maximum Current	1 A
Mechanical Life	>10 Million operations
Isolation between Contacts	>1000 V
Isolation Coil to Contacts	> 5000 V
Mechanical Bounce	<1 ms
RELAY DRIVE LINES SPECIFICATIONS	
Number of Lines	4
Sink Current	100 mA Max
Vil	0.8 V Max

*All specifications are subject to change without notice.
Publishing Date: May 26, 2004