32 channel analog multiplexer

Model 216800

SPECIFICATIONS

- Passband: 0 to 1 MHz
- Crosstalk: 50 db, 0 to 1 MHz
- Leakage Current: +/- 100 pa, max
- Channel off isolation: 50 db, 0 to 1 MHz
- Channel on resistance: 100 ohms, max
- Input Signal Range: +/- 10 volts; +/- 2 ma
- Contact type: Break before Make
- Switching time: 1 ms, max
- Control logic level: TTL, standard
- Power Supply: +5 vdc, +/- 15 vdc
- Environmental: 0 - 50^0 C, 10 to 95% RH

APPLICATIONS

The multiplexer was specifically designed for low current/low charge switching applications. It is ideally suited to the routing of signals from arrayed detectors, such as SWIC'S and HARP'S. The device is currently being applied at BNL in the LINAC injection line and the low energy beam transport line to route signal lines from detectors to instrumentation modules.

CONSTRUCTION

The analog multiplexer is fabricated using a 5 signal layer multilayer printed circuit board. Controlled impedance traces, and effective guarding and shielding provide uniform characteristics across all channels. Control and signal lines are segregated by layer to minimize interaction. The board is coated with a high impedance, low loss material with a low absorption characteristic. All power supply lines are filtered, and active IC's are bypassed. The multiplexer is housed in an aluminum enclosure with integral shielding.

CUSTOMIZATION

ATL can provide customization of its products, or the development of new instruments and systems to meet specific customer requirements. Form factor, panel nomenclature, control strategy and system integration are but a few examples of what changes can be requested. ATL is prepared to provide these services in a cost-effective manner and in a timely fashion.

ATL applies tomorrow's technology today

ADVANCED TECHNOLOGY LABORATORIES

1751 Loretta Avenue, Feasterville, PA 19053 • (215) 355-8111 • FAX (215) 355-1388 • wwww.atllabs.com