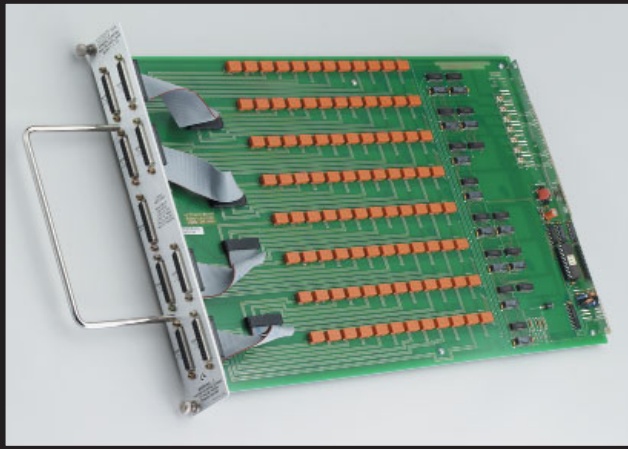# 7075

Two-pole Multiplexer Card
Eight 1×12

The Model 7075 is a general purpose multiplex switching card that consists of eight banks of independent 112 multiplexer switching. Each bank has two switched circuits (HI and GUARD). The row is connected through jumpers on the card to the general purpose analog backplane in the Model 707A or 708A switching mainframe. This provides the interconnect between cards for multiplexer expansion (124, 136, etc.). Jumpers may be removed to isolate any bank. A single card can be expanded to 196 by reconfiguring the supplied bank-to-bank jumpers. Eight 25-pin D connectors are provided for bank connections and one for row connection.

- **Low cost**
- **<5μV voltage offset**
- **<100pA offset current**
- **110V, 1A signal levels**
- **Uses standard 25-pin D connectors**
- **Compatible with Models 707A and 708A**

Ordering Information

7075 **Eight 1×12 Two-pole Multiplexer Card**

Accessories Supplied
Jumpers for multiplexer expansion

MULTIPLEX CONFIGURATION: Eight 1×12 banks. Adjacent banks can be connected together. Jumpers can be removed to isolate any bank from the backplane.

CONTACT CONFIGURATION: 2-pole Form A (HI, GUARD).

CONNECTOR TYPE: 25-pin subminiature D connector, eight for bank connection, one for row connection.

MAXIMUM SIGNAL LEVEL:
  DC Signals: 110V DC pin-to-pin, 1A switched, 30VA (resistive load).
  AC Signals: 175V AC peak pin-to-pin, 1A switched, 60VA (resistive load).

COMMON MODE VOLTAGE: 110V DC, 175V AC peak pin-to-pin or pin-to-chassis.

CONTACT LIFE:
  Cold Switching: 10^8 closures.
  At Maximum Signal Level: 10^5 closures.

CHANNEL RESISTANCE (per conductor): <0.50Ω initial, <1.5Ω at end of contact life.

CONTACT POTENTIAL: <5μV per contact pair (HI to GUARD).

OFFSET CURRENT: <100pA.

CROSSTALK (1MHz, 50Ω load): Bank: <−60dB.
  Channel: <−60dB.

INSERTION LOSS (1MHz, 50Ω source, 50Ω load): 0.1dB typical.

ISOLATION:
  Bank: $>10^{10}$Ω, <3pF.
  Channel: $>10^{10}$Ω, <5pF.
  Differential: Configured as 1×12: $>10^9$Ω, <100pF nominal. Configured as 1×96: $>10^8$Ω, <600pF nominal.
  Common Mode: Configured as 1×12: $>10^9$Ω, <165pF nominal. Configured as 1×96: $>10^8$Ω, <700pF nominal.

3dB BANDWIDTH (50Ω load):
  Configured as 1×12: 30MHz typical.
  Configured as 1×96: 2.5MHz typical.

RELAY SETTLING TIME: <3ms.

KEITHLEY

A GREATER MEASURE OF CONFIDENCE
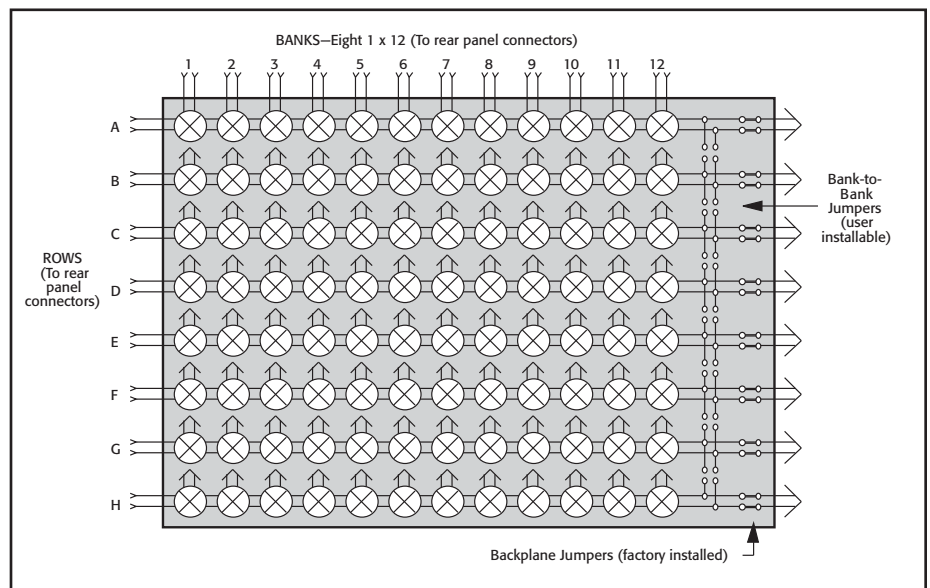
Use with Models 707A and 708A switching matrix mainframes

SWITCHING AND CONTROL