## 7074-D

## General Purpose Multiplexer Eight $1 \times 12$, Dry Reed

The Model 7074-D consists of eight banks of independent $1 \times 12$ multiplexer switching. Each bank has three switched circuits (HI, LO, Guard) and is connected through jumpers on the switching card to one of eight general-purpose signal paths, which provide automatic interconnect between switching cards. Jumpers may be removed to isolate any bank of switching or repositioned to cascade banks into longer switching configurations ( $1 \times 24,1 \times 36$, dual $1 \times 48,1 \times 96$, etc.) or banks may be connected in a tree configuration for improved isolation.
Channel inputs of the multiplexer card are through four 75 -pin mass terminated connectors. The corresponding cable accessory 7074-MTC is constructed with 24 sets of shielded twisted pair circuits for excellent noise immunity and electrical separation. Connections to the general purpose analog backplane can be accessed through jumpers on the multiplex card or by external connection through the mass terminated row connector provided.

MULTIPLEX CONFIGURATION: Eight $1 \times 12$ banks. Adjacent banks can be connected together. Jumpers can be removed to isolate any bank from the backplane.
CONTACT CONFIGURATION: 3 pole Form A (HI, LO, GUARD). CONNECTOR TYPE: Four 75 -pin connectors for bank connections, one 38 -pin connector for row connections.
MAXIMUM SIGNAL LEVEL: 200V, 1A carry/0.5A switched, 10VA peak (resistive load).
COMMON MODE VOLTAGE: 200 V maximum between any 2 pins or chassis.
OFFSET CURRENT: <100pA.
ISOLATION:
Bank: $>10^{10} \Omega,<10 \mathrm{pF}$.
Channel: $>10^{10} \Omega,<10 \mathrm{pF}$.
Differential: Configured as a $1 \times 12:>109 \Omega, 55 \mathrm{pF}$ nominal.
Common Mode: Configured as a $1 \times 12$ : $>10^{\circ} \Omega, 300 \mathrm{pF}$ nominal. CROSSTALK:
Bank: <- 55 dB at $1 \mathrm{MHz}, 50 \Omega$ load.
Channel: $<-55 \mathrm{~dB}$ at $1 \mathrm{MHz}, 50 \Omega$ load.

CONTACT LIFE: Cold Switching: $10^{8}$ closures. At Maximum Signal Levels: $10^{5}$ closures
CONTACT POTENTIAL: (per contact pair, $<1$ minute after actuation): $<5 \mu \mathrm{~V}$.
CHANNEL RESISTANCE: Initial: $<0.6 \Omega$. At End of Contact Life: $<1.6 \Omega$.
RELAY DRIVE CURRENT: (per relay): 15 mA .
INSERTION LOSS ( $1 \mathrm{MHz}, 50 \Omega$ source, $50 \Omega$ load):
Configured as a $1 \times 12$ : 0.1 dB typical.
3dB BANDWIDTH ( $50 \Omega$ load):
Configured as a $1 \times 12$ : 5 MHz typical.
RELAY SETTLING TIME: <3ms.
EMC: Conforms to European Union Directive 89/336/EEC.
SAFETY: Conforms to European Union Directive 73/23/EEC (meets EN61010-1/IEC 1010).
ENVIRONMENT: Operating: $0^{\circ}$ to $50^{\circ} \mathrm{C}$, up to $35^{\circ} \mathrm{C} @ 70 \%$ R.H. Storage: $-25^{\circ}$ to $65^{\circ} \mathrm{C}$.

ACCESSORIES AVAILABLE
BANK CONNECTOR ACCESSORIES
7074-CIT Contact Extraction Tool
7074-HCT Hand Crimping Tool
7074-KIT Mass Terminated Plug with Contacts
7074-MTC-20 Mass Terminated Cable Assembly, 6 m (20 ft)
7074-MTR Mass Terminated Receptacle with Contacts
7074-RTC Relay Test Shorting Connector

## ROW CONNECTOR ACCESSORIES

7078-CIT Contact Insertion and Extraction Tools
7078-HCT Hand Crimping Tool
7078-KIT Mass Terminated Plug with Contacts
7078-MTC-5 Mass Terminated Cable Assembly, 1.5 m (5 ft)
7078-MTC-20 Mass Terminated Cable Assembly, 6 m ( 20 ft )
7078-MTR Mass Terminated Receptacle with Contacts

