## 7035

## 10MHz 1×4 Multiplexer Card

## 9 Independent $1 \times 42$-Pole Multiplexers

The Model 7035 9-Bank Multiplexer Card has nine $1 \times 4$ multiplexers. The switch contact configuration for each channel is 2-pole form A. The card's nine banks can be combined for a wide variety of switching configurations using external connections. This flexibility makes the Model 7035 wellsuited for production testing of a variety of telecommunications products and systems and low power portable devices.
MULTIPLEX CONFIGURATION: 9 independent $1 \times 42$-pole multiplex banks
CONTACT CONFIGURATION: 2-pole Form A (Hi, Lo)
CONNECTOR TYPE: 96-pin male DIN connector (7011-KIT-R mating connector included).
MAXIMUM SIGNAL LEVEL: 60 V DC, 30 V rms, 42 V peak between any two inputs or chassis, 1 A switched. 30VA (resistive load).

CONTACT LIFE: Cold Switching: $10^{8}$ closures
At Maximum Signal Levels: $10^{5}$ closures

CHANNEL RESISTANCE (per conductor): $<1 \Omega$.
CONTACT POTENTIAL: $<1 \mu \mathrm{~V}$ per channel contact pair
$<3 \mu \mathrm{~V}$ typical per single contact.
OFFSET CURRENT: <100pA.
ACTUATION TIME: 3 ms .
ISOLATION: Bank:
$>10^{9} \Omega,<25 \mathrm{pF}$. $>10^{\circ} \Omega,<50 \mathrm{pF}$. $>10^{\circ} \Omega,<100 \mathrm{pF}$. $>10^{\circ} \Omega,<200 \mathrm{pF}$.
CROSSTALK (1MHz, $50 \Omega$ Load): Bank: <-40dB
Channel: <-40dB.
INSERTION LOSS ( $50 \Omega$ Source, 50 Load): $<0.25 \mathrm{~dB}$ below 1 MHz , $<3 \mathrm{~dB}$ below 10 MHz
RELAY DRIVE CURRENT (per relay): 16 mA .
ACCESSORIES AVAILABLE
7011-KIT-R 96-Pin Female Connector Kit
7035-MTC-2 $\quad 96$-Pin Mass Terminated Cable, Female to Female, 2m
7011-MTR $\quad$ 96-Pin Male Connector Kit

## 70359 Bank 1x4 Multiplexer Switching Card

Accessories Supplied
7011-KIT-R 96-Pin Female
Connector Kit

## 7038

## 2GHz RF Switch Card

## 3 Isolated $1 \times 4$ Multiplexers, $75 \Omega$

The Model $703875 \Omega$ 2.0GHz Multiplexer Card is designed to speed testing and evaluation of a broad-range of telecommunications hardware, including coaxial cable-based equipment, cable television equipment, and high-speed Internet access products. The card simplifies automated switching of high-frequency RF signals, even those with bandwidths of up to 2 GHz .

CHARACTERISTIC IMPEDANCE: $75 \Omega$ nominal. MULTIPLEXERS PER CARD: 3 (with isolated ground). CHANNELS PER MULTIPLEXER: 4.
CONTACT CONFIGURATION: 1 -pole, 1 of 4 tree. Channels 1,5 , and 9 normally closed.
RELAY DRIVE CURRENT: 154 mA per channel.
CONNECTOR TYPE: $75 \Omega$ miniature SMB receptacle.
ACTUATION TIME: 6 ms .
MAXIMUM VOLTAGE: Any terminal (center or shield) to any other terminal or chassis: 24 V .

MAXIMUM CURRENT: 10 mA DC.
MAXIMUM POWER: 10W @ 1.2GHz.
ISOLATION: Multiplexer to Multiplexer: $>1 G \Omega$. Center to Shield: $>1 \mathrm{G} \Omega, 60 \mathrm{pF}$. Channel to Channel: $>100 \mathrm{M} \Omega$
SIGNAL DELAY: <1ns.
CONTACT POTENTIAL: $15 \mu \mathrm{~V}$.
CONTACT LIFE: $3 \times 10^{5}$ closures @ $24 \mathrm{VDC}, 10 \mathrm{~mA} \mathrm{DC} ; 1 \times 10^{5}$ closures@ $10 \mathrm{~W}, 1.2 \mathrm{GHz}$ signal; $5 \times 10^{6}$ closures @ cold switching.

CONTACT RESISTANCE: $<1 \Omega$.
AC PERFORMANCE:

|  | $\leq 10$ | $\leq 100$ | $\leq 500$ | $\leq 900$ | $\leq 2$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| For $\mathrm{Z}_{\mathrm{L}}=\mathrm{Z}_{\mathrm{S}}=75 \Omega$ | MHz | $\mathbf{M H z}$ | $\mathbf{M H z}$ | $\mathbf{M H z}$ | $\mathbf{G H z}$ |
| Insertion Loss (dB) | $<0.25$ | $<0.5$ | $<1.0$ | $<1.5$ | $<3.0$ |
| Crosstalk (dB) |  |  |  |  |  |
| $\quad$ Channel-to-Channel | $<-90$ | $<-80$ | $<-65$ | $<-55$ | $<-40$ |
| $\quad$ Mux. to Mux. | $<-90$ | $<-80$ | $<-70$ | $<-60$ | $<-55$ |
| VSWR | $<1.2$ | $<1.25$ | $<1.5$ | $<1.5$ | $<2.2$ |

ENVIRONMENT: Operating: $0^{\circ}$ to $50^{\circ} \mathrm{C}$, up to $35^{\circ} \mathrm{C}$ at $<80 \%$ RH. Storage: $-25^{\circ} \mathrm{C}$ to $65^{\circ} \mathrm{C}$.
EMC: Conforms to European Union Directive 89/336/EEC.
SAFETY: Conforms to European Union Directive 73/23/EEC (meets EN61010-1/IEC 1010).


