7035



Great fit for low frequency telecom test

Ordering Information

9 Bank 1×4 Multiplexer **Switching Card**

7011-KIT-R 96-Pin Female Connector Kit

7038



- DC to 2GHz, 75Ω, signal switching
- High channel to channel
- **Miniature SMB connectors**

Ordering Information

Three 1×4, 2GHz, 75 Ω Multiplexer

1.888.KEITHLEY (U.S. only)

www.keithley.com

10MHz 1×4 Multiplexer Card

9 Independent 1×4 2-Pole Multiplexers

The Model 7035 9-Bank Multiplexer Card has nine 1×4 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 well-suited for production testing of a variety of telecommunications products and systems and low power portable devices.

MULTIPLEX CONFIGURATION: 9 independent 1×4 2-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: 60V DC, 30V rms, 42V peak between any two inputs or chassis, 1A switched. 30VA (resistive load).

CONTACT LIFE: Cold Switching: 108 closures. At Maximum Signal Levels: 105 closures.

CHANNEL RESISTANCE (per conductor): $<1\Omega$.

CONTACT POTENTIAL: $<1\mu V$ per channel contact pair. <3μV typical per single contact.

OFFSET CURRENT: <100pA.

ACTUATION TIME: 3ms.

ISOLATION: Bank: $>10^{9}\Omega$, <25 pF. Channel to Channel: $>10^{9}\Omega$, <50 pF. Differential: $>10^{9}\Omega$, <100pF. Common Mode: $>10^{9}\Omega$, <200pF.

CROSSTALK (1MHz, 50Ω Load): Bank: <-40dB.

Channel: <-40dB.

INSERTION LOSS (50Ω Source, 50 Load): <0.25dB below

1MHz, <3dB below 10MHz.

RELAY DRIVE CURRENT (per relay): 16mA.

ACCESSORIES AVAILABLE

7011-KIT-R 96-Pin Female Connector Kit 7035-MTC-2 96-Pin Mass Terminated Cable, Female to Female 2m 7011-MTR 96-Pin Male Connector Kit

2GHz RF Switch Card

3 Isolated 1×4 Multiplexers, 75 Ω

The Model 7038 75Ω 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 2GHz.

CHARACTERISTIC IMPEDANCE: 75Ω 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: 154mA per channel.

CONNECTOR TYPE: 75Ω miniature SMB receptacle.

ACTUATION TIME: 6ms

MAXIMUM VOLTAGE: Any terminal (center or shield) to any other terminal or chassis: 24V.

MAXIMUM CURRENT: 10mA DC

MAXIMUM POWER: 10W @ 1.2GHz.

ISOLATION: Multiplexer to Multiplexer: $>1G\Omega$. Center to **Shield:** >1G Ω , 60pF. Channel to Channel: >100M Ω .

SIGNAL DELAY: <1ns.

CONTACT POTENTIAL: 15µV

CONTACT LIFE: 3×105 closures @ 24VDC, 10mA DC; 1×105 closures @ 10W, 1.2GHz signal; 5×106 closures @ cold switching. CONTACT RESISTANCE: $<1\Omega$.

AC PERFORMANCE:

≤100 ≤500 ≤900 For $Z_L = Z_S = 75\Omega$ MHz MHz MHz MHz GHz Insertion Loss (dB) < 0.25 < 0.5 <1.0 <1.5 Crosstalk (dB) Channel-to-Channel <-90 <-80 <-65 <-55 <-40 Mux. to Mux. <-90 <-80 <-70 <-60 <-55 VSWR <1.2 <1.25 <1.5 <1.5 <2.2

ENVIRONMENT: Operating: 0° to 50°C, up to 35°C at <80%

RH. Storage: -25°C to 65°C.

EMC: Conforms to European Union Directive 89/336/EEC.

SAFETY: Conforms to European Union Directive 73/23/EEC (meets EN61010-1/IEC 1010).



