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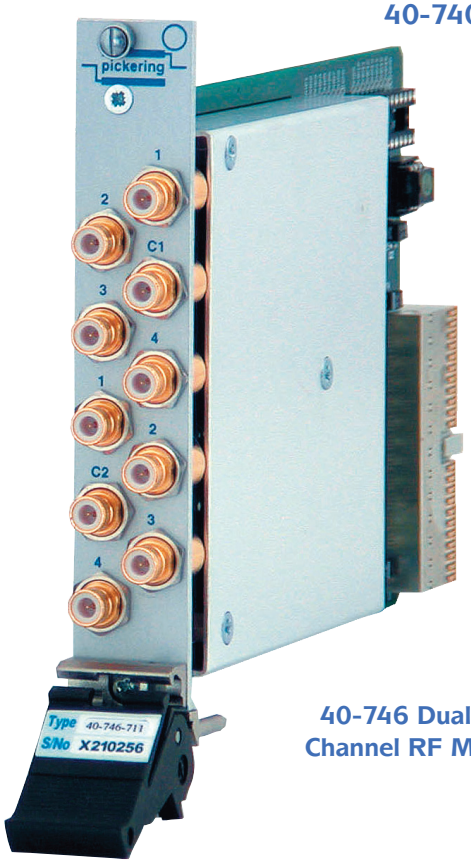
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Find the *Pickering 40-746-751* at our website: ***Click HERE***

40-740/745/746
RF Multiplexer Module

- R.F. Multiplexer with 2GHz Bandwidth
- 50Ω and 75Ω Versions Available
- Available as 8 to 1 or Single/Dual 4 to 1
- Single 4 to 1 Version Available To Automatically Terminate Non-Selected Channels
- Choice of Front Panel Mounted Coaxial Connectors
- 75Ω Version Suitable for Telecoms and High Quality Video Switching
- VISA/IVI Drivers Supplied for Windows 2000/NT/XP
- Supported by PXI or LXI Chassis
- 2 Year Warranty



40-746 Dual 4 Channel RF MUX

40-740, 40-745 and 40-746 RF Multiplexers are a range of Bi-Directional Multiplexers with bandwidths to beyond 2000MHz.

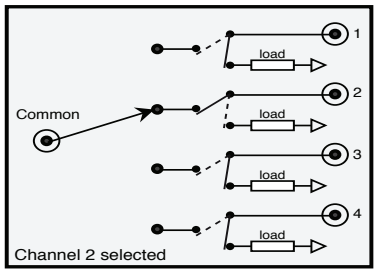
They are arranged as Single 8 to 1, Dual 4 to 1 or Single 4 to 1 configurations, all with excellent Insertion Loss, VSWR & Isolation, in 50Ω or 75Ω versions with a wide choice of connectors:

40-740 Single 4 to 1 RF Multiplexer with automatic termination of all non-selected signals.

40-745 Single 8 to 1 or 4 to 1 RF Multiplexer (no termination option).

40-746 Dual 4 to 1 RF Multiplexer (no termination option).

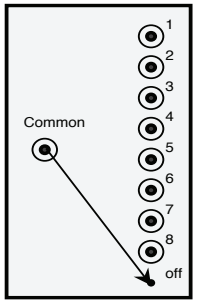
Applications for the 40-740/75/46 include routing high frequency signals to and from oscilloscopes, analysers, signal generators and synthesizers, telecoms tributary switching (from 2MBit/s to 155MBit/S), video/audio switching and switching high frequency logic signals.



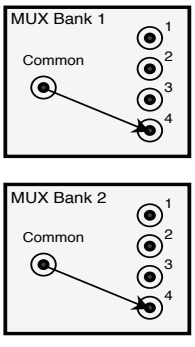
40-740 Single 4 Channel Multiplexer With Automatic Termination Of Non-Selected Channels



40-740 Single 4 Channel RF MUX, BNC Version



40-745 Single 8 Channel Multiplexer



40-746 Dual 4 Channel Multiplexer (dual channel mode has no off state)

ISSUE 4, SEP 2006

General Specification (All Versions)

Maximum Voltage:	50V DC
Maximum Power:	10W
Maximum Carry Power (900MHz):	15W
Maximum Switch Current:	0.1A
On Path Resistance:	<500mΩ
Off Path Resistance:	>10^8Ω
Differential Thermal Offset:	<20µV
Expected Life (Low Power):	>$2x10^7$ operations
Expected Life (Max Power):	>$3x10^5$ operations
Switching Time:	5ms

Isolation and Crosstalk Specification

Isolation (0 to 2000MHz):	>40dB
Crosstalk (0 to 2000MHz):	>50dB

50Ω Specification (except BNC versions)

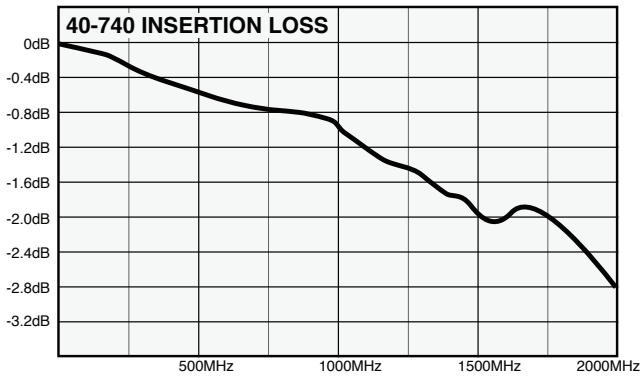
Maximum Frequency:	2000MHz
Rise Time:	<0.2ns
Insertion Loss:	<3dB
VSWR (0 to 2000MHz):	<1:1.7

75Ω Specification (except BNC versions)

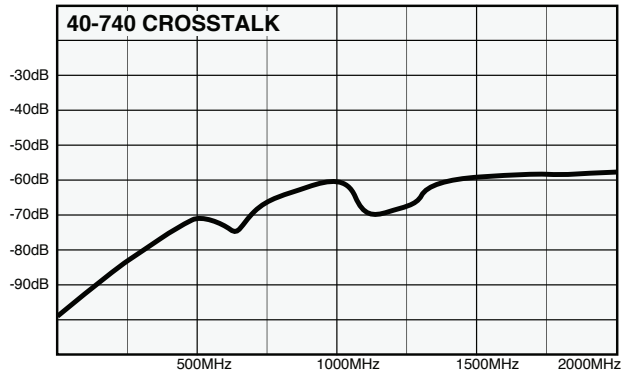
Maximum Frequency:	2000MHz
Rise Time:	<0.3ns
Insertion Loss:	<3dB
VSWR (0 to 1000MHz):	<1:1.8

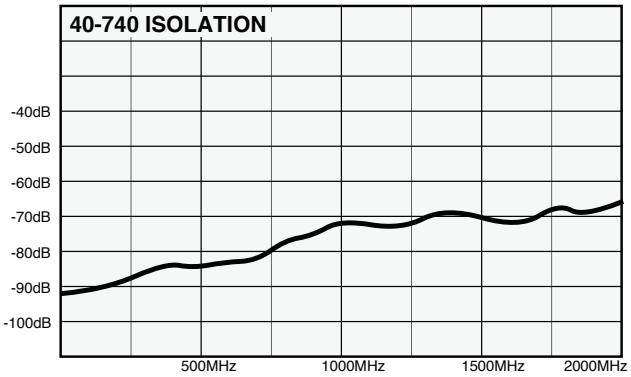
75Ω Specification (50Ω & 75Ω BNC versions)

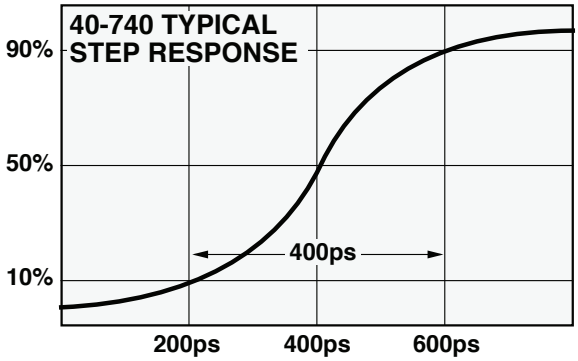
Maximum Frequency:	1000MHz











RF Performance Plots for 40-740 RF Multiplexer, 50Ω version

RF Relay Type

The 40-740/745/746 is fitted with high reliabillty RF Relays, these offer long life with good low level switching performance.

Spare RF Relays are built onto the circuit board to facilitate easy maintenance with minimum downtime.

Programming

Pickering provide kernel, VISA and IVI drivers which are compatible with Windows 2000/NT/XP operating systems, the VISA driver is also compatible with the LabVIEW RT operating system.

These drivers may be used with a variety of programming environments and applications including :-

National Instruments products (LabVIEW/LabWindows/CVI/ Switch Executive/MAX/TestStand etc.)

Microsoft Visual Studio products (Visual Basic/Visual C+)

Agilent VEE

Mathworks Matlab

Other environments are also supported, please contact Pickering with specific enquiries.

Power Requirements

+3.3V	+5V	+12V	-12V
0	320mA (typ 240mA)	0	0

Width and Dimensions

Single slot 3U PXI (CompactPCI card).

PXI & CompactPCI Compliance

All Pickering Interfaces PXI modules comply with the PXI Specification 2.1. Local Bus, Interrupts, Trigger Bus and Star Trigger are not implemented.

Safety & CE Compliance

All modules are fully CE compliant and meet applicable EU directives: Low-voltage safety EN61010-1:2001, EMC Immunity EN61000-6-1:2001, Emissions EN55011:1998.

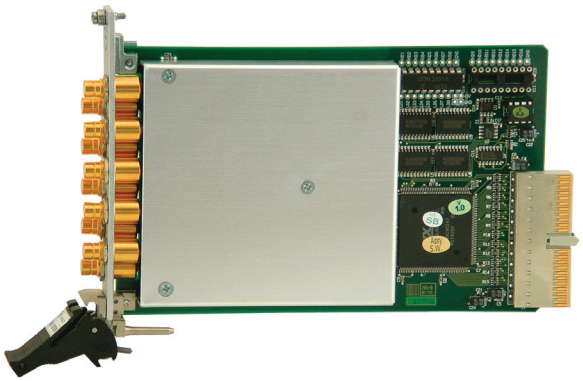
Operating/Storage Conditions

Operating Conditions

Operating Temperature:	0°C to 55°C
Humidity:	Up to 95% non-condensing
Altitude:	5000m

Storage and Transport Conditions

Storage Temperature:	-20°C to +75°C
Humidity:	Up to 95% non-condensing
Altitude:	15000m



Connectors

PXI bus via 32 bit P1/J1 backplane connector. Signals via front panel mounted coaxial connectors, type dependant upon product code.

Product Order Codes

4 to 1 RF Multiplexer With Automatic Termination	
50Ω, SMB Connector, 2GHz	**40-740-511**
50Ω, SMA Connector, 2GHz	**40-740-521**
75Ω, SMZ/Type 43 Connector, 2GHz	**40-740-711**
75Ω, Siemens 1.0/2.3 Connector, 2GHz	**40-740-731**
75Ω, Mini SMB Connector, 2GHz	**40-740-751**
4 to 1 RF Multiplexer	
50Ω, BNC Connector, 1GHz	**40-745-501**
50Ω, SMB Connector, 2GHz	**40-745-591**
75Ω, BNC Connector, 1GHz	**40-745-701**
8 to 1 RF Multiplexer	
50Ω, SMB Connector, 2GHz	**40-745-511**
50Ω, SMA Connector, 2GHz	**40-745-521**
75Ω, SMZ/Type 43 Connector, 2GHz	**40-745-711**
75Ω, Siemens 1.0/2.3 Connector, 2GHz	**40-745-731**
75Ω, Mini SMB Connector, 2GHz	**40-745-751**
Dual 4 to 1 RF Multiplexer	
50Ω, SMB Connector, 2GHz	**40-746-511**
50Ω, SMA Connector, 2GHz	**40-746-521**
75Ω, SMZ/Type 43 Connector, 2GHz	**40-746-711**
75Ω, Siemens 1.0/2.3 Connector, 2GHz	**40-746-731**
75Ω, Mini SMB Connector, 2GHz	**40-746-751**

–C Alternative connectors may be available, please consult factory.

Mating Connectors & Cabling

Examples of connectors and cabling for the 40-740 series are:

40-977-501-1M Cable, 50Ω BNC, Plug to Plug, 1 Meter Length.

40-977-511-1M Cable, 50Ω SMB, Plug to Plug, 1 Meter Length.

40-977-711-1M Cable, 75Ω SMZ/Type 43, Plug to Plug, 1 Meter Length.

40-977-751-1M Cable, 75Ω Mini SMB, Plug to Plug, 1 Meter Length.

Please refer to the Pickering Interfaces "**Interconnection Solutions**" catalog for the full list of connector/cabling options, including drawings, photos and specifications. This is available in either print or as a download. Alternatively our web site has dynamically linked connector/cabling options, including pricing, for all Pickering PXI modules.



Latest Details

Please refer to our Web Site for Latest Product Details.

www.pickeringtest.com

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