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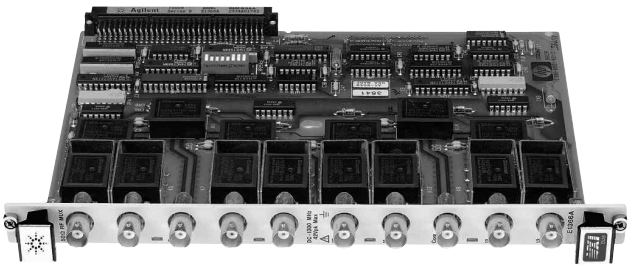
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Find the *Keysight / Agilent E1366A* at our website: ***Click HERE***

Agilent E1366A
Dual 1x4, 50 Ω RF Multiplexer
Data Sheet

- 1-Slot, B-size, register based
- Two 1x4 multiplexers
- Up to 1.3 GHz signals switched
- BNC connectors
- Off-channels terminated
- Low insertion loss



Agilent E1366A

Description

The Agilent E1366A 50 Ω RF Multiplexer is a **B-size, 1-slot, register-based VXI module.** It is the ideal choice to switch test signals to your oscilloscope and spectrum, network, distortion analyzers, or other RF equipment. The E1366A is identical to the E1367A, except that the E1367A has a 75 Ω characteristic impedance.

Switching consists of connecting a channel to its common terminal. The E1366A can easily be used with SCPI commands to scan multiple channels, where each channel is switched to its common, one at a time. When open (disconnected from common), each channel is connected to a 50 Ω termination.

This multiplexer module is arranged as two independent banks of channels (Bank 0 and Bank 1), each acting as a 1x4 one-wire multiplexer. Only one channel in each bank can be connected to its common at any time. Each channel consists of a nonlatching armature relay. At power-on or reset, all channels are open and connected to their termination resistors. The termination resistor can be removed if desired. The multiplexer relays are arranged in a tree-switched configuration, providing high isolation and low VSWR.

Refer to the Agilent Technologies Website for instrument driver availability and downloading instructions, as well as for recent product updates, if applicable.

Cables and Connectors

Various 50 Ω cables are available from Agilent for connecting to the BNC connectors on the front panel of the multiplexer. Adapters and other connectors are also available.

C-size Adapter

For installing the E1366A in a C-size mainframe, the E1403C active adapter is recommended.

Product Specifications

Input

Maximum voltage (center or shield-to-center, shield or chassis):	42 V
Maximum current (per channel or common):	
DC:	1 A
AC rms:	1 A
Maximum power (per channel or common):	
DC:	24 W
AC:	24 VA

DC

Maximum thermal offset:	6 µV
Closed channel resistance (typical):	<1 Ω initial, <3 Ω end of relay life
Insulation resistance (between any two points):	>10E8 Ω ≤40 °C, ≤65% RH

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AC

Note: For AC performance, ZL=ZS=ZO, ≤40 °C, RH ≤95% for C-size, RH ≤65% for B-size

Characteristic impedance (Zo):	50 Ω
Insertion loss:	
<10 MHz:	<0.3 dB
<100 MHz:	<0.7 dB
<500 MHz:	<1.5 dB
<1.3 GHz:	<3.0 dB
<3 GHz (typ):	n/a
Crosstalk (channel-to-channel):	
Derate crosstalk specifications by 6 dB if all channels are unterminated.	
<10 MHz:	<–90 dB
<100 MHz:	<–80 dB
Crosstalk (channel-to-channel, one channel closed or channel-to-common) (terminated):	
Derate crosstalk specifications by 6 dB if all channels are unterminated.	
<200 MHz:	n/a
<500 MHz:	<–60 dB
<1.3 GHz:	<–40 dB
<3 GHz (typ):	n/a
VSWR:	
<10 MHz:	<1.2
<100 MHz:	<1.25
<200 MHz:	n/a
<500 MHz:	<1.35
<1.3 GHz:	<1.55
<3 GHz:	n/a
Risetime:	<300 ps
Signal delay:	<3 ns
Capacitance:	
Center-shield:	<60 pF
Chassis-shield:	< 0.15 μF

General Characteristics

Relays:	Non-latching armature
Power up/down state:	All open
Minimum relay life:	
No load:	5x10E6 operations
Rated load:	10E5 operations

General Specifications

VXI Characteristics

VXI device type:	Register based, A16, slave only
Size:	B
Slots:	1
Connectors:	P1
Shared memory:	None
VXI busses:	None
C-size compatibility:	Requires E1403C

Instrument Drivers

See the Agilent Technologies Website (http://www.agilent.com/find/inst_drivers) for driver availability and downloading.

Command module firmware:	Downloadable
Command module firmware rev:	A.01
I-SCPI Win 3.1:	Yes
I-SCPI Series 700:	Yes
C-SCPI LynxOS:	Yes
C-SCPI Series 700:	Yes
Panel Drivers:	Yes
VXI*plug&play* Win Framework:	No
VXI*plug&play* Win95/NT Framework:	No
VXI*plug&play* HP-UX Framework:	No

Module Current

	I_{PM}	I_{DM}
+5 V:	0.1	0.01
+12 V:	0.18	0.01
–12 V:	0	0
+24 V:	0	0
–24 V:	0	0
–5.2 V	0	0
–2 V:	0	0

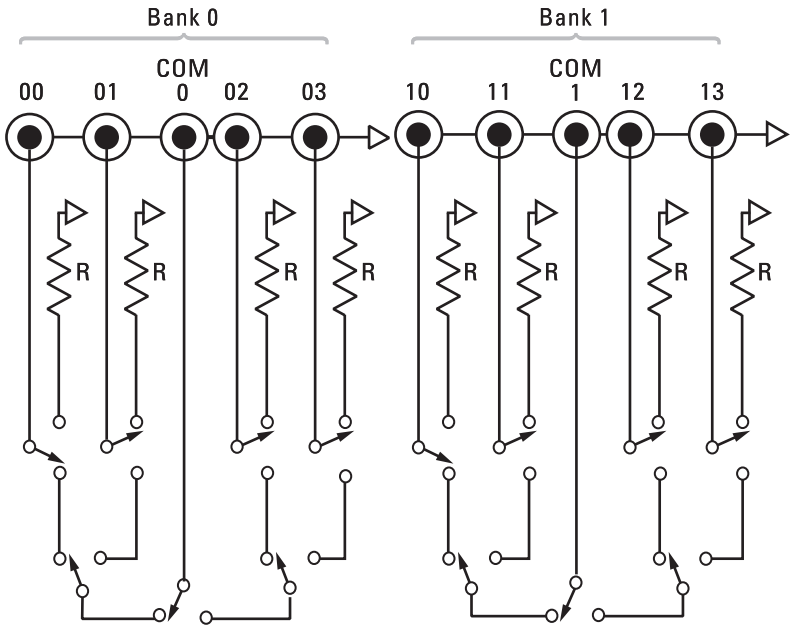
Cooling/Slot

Watts/slot:	3.00
ΔP mm H_2O:	0.05
Air Flow liter/s:	0.25

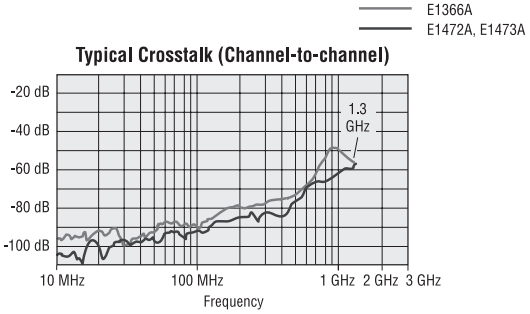
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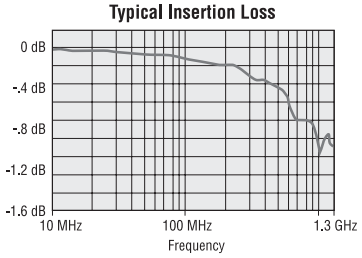
Description	Product No.
Dual 1x4 50 Ω RF Multiplexer	E1366A
Service Manual	E1366A 0B3

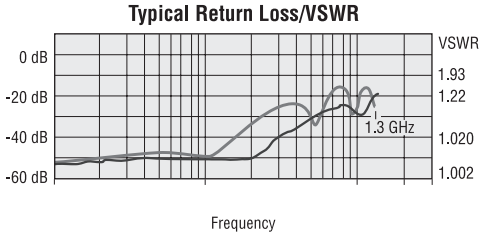
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Agilent E1366A Circuit Diagram







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Related Literature

2000 Test System and VXI Catalog CD-ROM,
Agilent Pub. No. 5980-0308E (detailed specifications for VXI products)

2000 Test System and VXI Catalog,
Agilent Pub. No. 5980-0307E (overview of VXI products)

1998 Test System and VXI Products Data Book,
Agilent Pub. No. 5966-2812E

Online

Internet access for Agilent product information, services and support
www.agilent.com/find/tmdir

VXI product information
www.agilent.com/find/vxi

Defense Electronics Applications
www.agilent.com/find/defense_ATE

Agilent Technologies VXI Channel Partners
www.agilent.com/find/vxichanpart

Agilent Technologies' HP VEE Application Website
www.agilent.com/find/vee

Agilent Technologies Data Acquisition and Control Website
www.agilent.com/find/data_acq

Agilent Technologies Instrument Driver Downloads
www.agilent.com/find/inst_drivers

Agilent Technologies Electronics Manufacturing Test Solutions
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Japan:
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(tel) (82 2) 2004 5004
(fax) (82 2) 2004 5115

Latin America:
(tel) (305) 269 7500
(fax) (305) 269 7599

Taiwan:
(tel) 0800 047 866
(fax) 0800 286 331

Other Asia Pacific Countries:
(tel) (65) 6375 8100
(fax) (65) 6836 0252
(e-mail) tm_asia@agilent.com

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