

# 6-Port Mesh Network

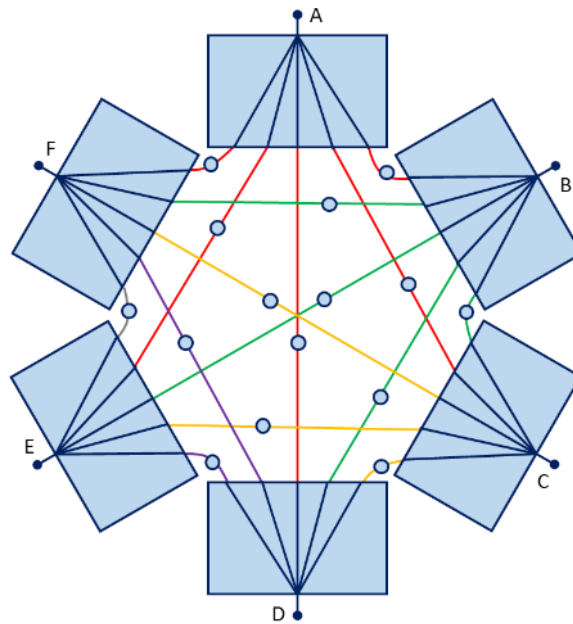
# ZTMN-0695A

50Ω 2000-6000 MHz



Model Name	Connector Type
ZTMN-0695A-S	SMA female
ZTMN-0695A-N	N-type female
ZTMN-0695A-T	TNC female

## Functional Block Diagram



○ = programmable attenuator

Rev	Date	Description
X0	2-Jul-18	Initial datasheet prepared

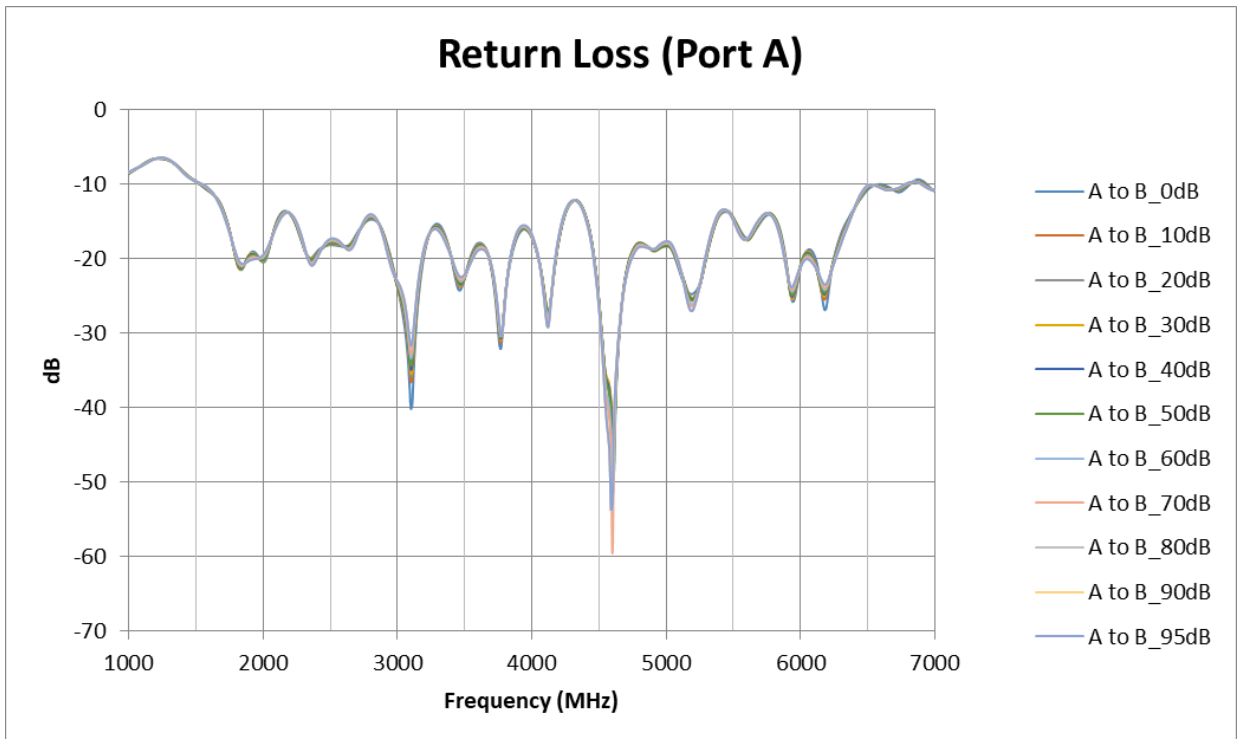
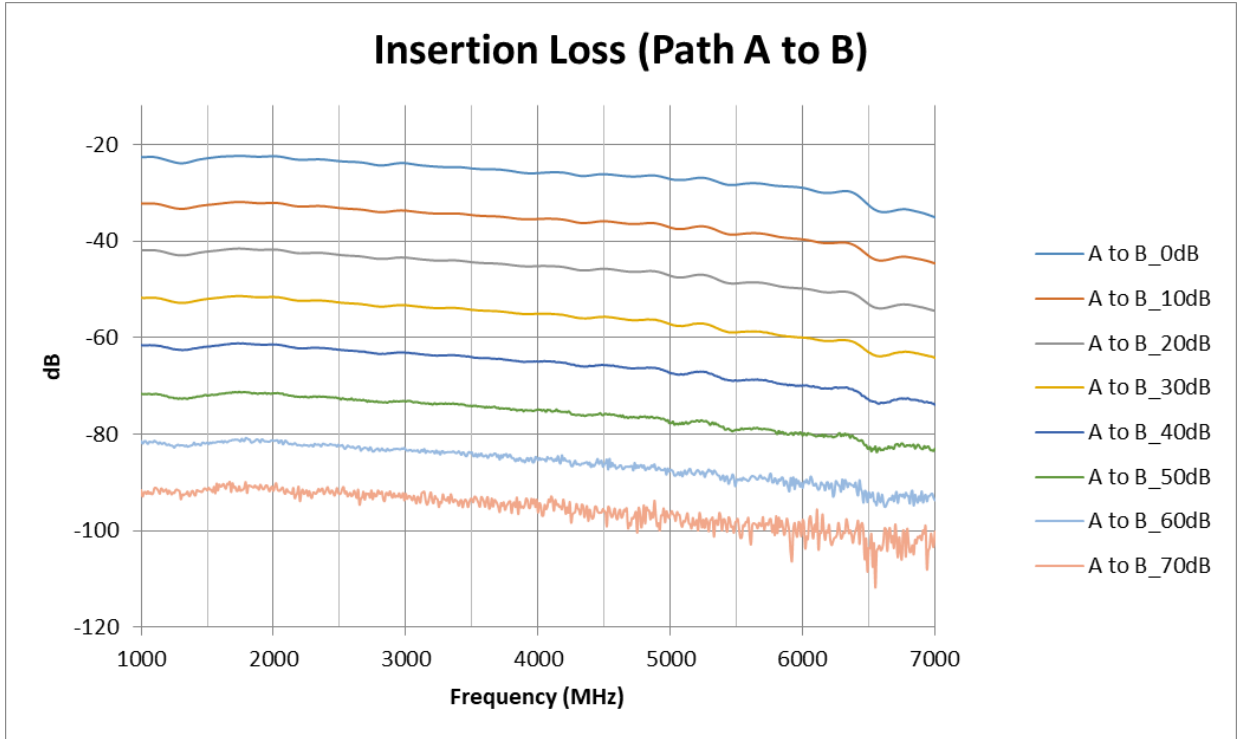
**Mechanical Specifications**

<b>Dimensions</b>	19" (W) x 2U (H) x 20" (D)
<b>Case Material</b>	Aluminum (with protective coatings to prevent corrosion)
<b>Case Drawing</b>	99-01-2646
<b>RF Connectors</b>	<ul style="list-style-type: none"> <li>• ZTMN-0695A-S: SMA female</li> <li>• ZTMN-0695A-N: N-type female</li> <li>• ZTMN-0695A-T: TNC female</li> </ul>
<b>Front Panel Marking</b>	<ul style="list-style-type: none"> <li>a) Mini-Circuits part number</li> <li>b) 6-Port Mesh Network Test Drawer</li> <li>c) 2000-6000 MHz</li> </ul>
<b>Front panel</b>	<ul style="list-style-type: none"> <li>a) 6 x RF ports</li> <li>b) ON/OFF switch with indicator light</li> <li>c) Carry handles</li> </ul>
<b>Rear panel</b>	<ul style="list-style-type: none"> <li>a) AC mains power supply input</li> <li>b) USB &amp; RJ45 control connections</li> <li>c) Label with date code/serial number/MCL part# for traceability</li> </ul>
<b>Control Interface</b>	USB and Ethernet TCP/IP supporting HTTP and TELNET protocols
<b>Power supply</b>	<ul style="list-style-type: none"> <li>a) AC mains power supply (90-260 V, 47-63 Hz)</li> <li>b) 2A, 250V fuse rating</li> </ul>
<b>Operating temp</b>	0° to +50° C

**Electrical Specifications at 25°C**

Parameter	Conditions	Min	Typical	Max	Unit
<b>Frequency</b>		2000		6000	MHz
<b>Insertion Loss</b>	@ 2 GHz		23		dB
	@ 6 GHz		29		
<b>Return Loss</b>	600 – 6000 MHz		12		dB
<b>Attenuation Range</b>	Per Path	0		95	dB
<b>Attenuation Step Size</b>	0 – 90 dB Range		0.25		dB
	90 – 95 dB Range		0.50		
<b>Attenuation Accuracy</b>	3000 MHz (See RC4DAT-6G-95 Datasheet for Details)		+/- 0.5		dB
<b>Input Power</b>				+30	dBm

**Electrical Performance @ 25°C**



## Software Specifications

### Software & Documentation Download:

- Mini-Circuits' full software and support package including user guide, Windows GUI, DLL files, programming manual and examples are available on request
- Please contact [testsolutions@minicircuits.com](mailto:testsolutions@minicircuits.com) for support

### Minimum System Requirements:

Parameter	Requirements	
Interface	USB HID & Ethernet (HTTP & Telnet)	
System Requirements	GUI	Windows 98 or later
	USB API DLL	Windows 98 or later and programming environment with ActiveX or .NET support
	USB Direct Programming	Linux; Windows 98 or later
	Ethernet	Windows, Linux or Mac computer with a network port and Ethernet TCP / IP support
Hardware	Pentium II or later with 256 MB RAM	

### Application Programming Interface (API)

#### Ethernet Support:

- Simple ASCII / SCPI command set for attenuator control
- Communication via HTTP or Telnet
- Supported by most common programming environments

#### USB Support (Windows):

- ActiveX COM DLL file for creation of 32-bit programs
- .NET library DLL file for creation of 32 / 64-bit programs
- Supported by most common programming environments (refer to application note [AN-49-001](#) for summary of supported environments)

#### USB Support (Linux):

- Direct USB programming using a series of USB interrupt codes

Full programming instructions and examples available for a wide range of programming environments / languages.

**Graphical User Interface (GUI) for Windows - Key Features**

- Connect via USB or Ethernet
- Run GUI in “demo mode” to evaluate software without a hardware connection
- View and set all attenuation channels independently or in groups
- Configure automated attenuation sweep or hop sequences for groups of channels
- Configure Ethernet settings
- Upgrade firmware

Model Name: ZTMN-0695B  
 Serial Number: 123456789  
 Channels: 16  
 User Name: Admin  
 Connection: Telnet (Demo)  
 IP: 10.10.10.10  
 Port: 23

**Set Attenuation**

Select Channel(s) -  
 Single Channel  Multi Channels  
 All Channels  
 Group: [ ]

Set Attenuation (0 -95 dB):  
 [ 95.00 ] [ Apply ]  
 Auto Apply

**Current Attenuation -**  
 Channel: 01A: Path A<>B  
 Attenuation: 95.00 dB

ZTMN-0695B	A	B	C	D
1	Path A<>B   95.00	Path A<>D   95.00	Path B<>C   95.00	Path A<>C   95.00
2	Path B<>D   95.00	Path A<>F   95.00	Path B<>E   95.00	Path A<>E   95.00
3	Path C<>D   95.00	Path D<>E   95.00	Path E<>F   95.00	INACTIVE   95.00
4	Path B<>F   95.00	Path C<>F   95.00	Path D<>F   95.00	Path C<>E   95.00

Connection Options  
 Automation Mode  
 Configuration Settings  
 Ethernet Settings  
 Firmware  
 Users Control

**Mechanical Drawing**

