

PROGRAMMABLE ATTENUATOR MVE2P18-100

0.001 to 6GHz
4/4 CHANNEL
0-100dB

Features

- ✓ High Attenuation levels up to 100dB
- ✓ Step Resolution of 0.25dB
- ✓ Small Size, High Accuracy



Specifications

PART NUMBER	FREQUENCY	ATTENUATION RANGE	VSWR	CONNECTOR TYPE	CONTROL	SWITCHING SPEED
MVE2P18-100	0.001-6GHz	0-100dB	2.1:1 MAX. 1.5:1 TYP.	SMA Female	LAN(RJ45) 、 USB(TYPE-C)	2us

ATTENUATION ACCURACY

$\pm(0.3+6.5\%Att)dB@1MHz-6GHz$

RF Input Power

30dBm MAX.

POWER SUPPLY

+5V

IMPEDANCE

50ohm

INSERTION LOSS

14dB @ 1MHz-6GHz MAX.

ENVIRONMENTAL

OPERATING TEMPERATURE : -20°C TO +70°C

MATERIALS

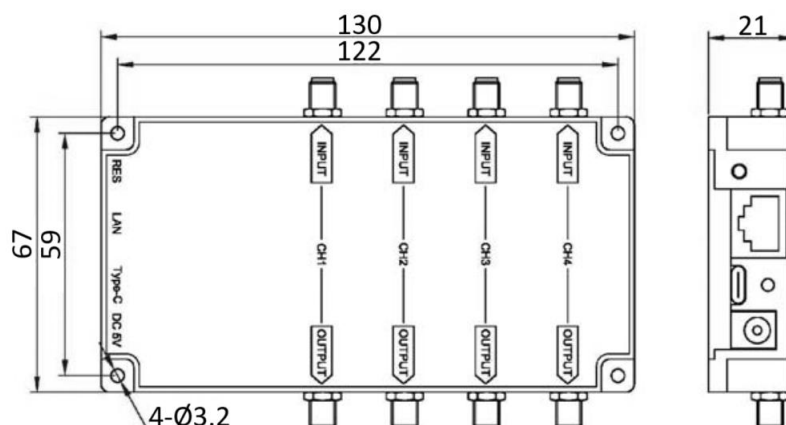
CONNECTOR: BRASS, NICKLE OR GOLD PLATED

CENCTOR CONDUCTOR: BERYLLIUM BRONZE, GOLD PLATED

BODY: ALUMINUM (Aluminum scratches more easily than more durable materials.), SAND BLASTING

Tolerance: X= $\pm 5\%$

Outline Drawing (Unit: mm)



NOTES:

1. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME
2. CUSTOMER OUTLINE DRAWING FOR REFERENCE ONLY



Transmission Control Protocol:

Configuration Environment

All commands should be typed in halfwidth and should be ended by \r\n

<CR>= Carriage return <LF>= Line feed

Telnet connecting Hardware	Network Cable
TCP port	23
IP Address	Default IP: 192.168.0.7 Netmask :255.255.255.0 broadcast :192.168.0.1

USB connecting Hardware	TYPE-C
Baud Rate	9600
Data Bit	8 bit
Parity Bit	NO
Stop Bit	1

Format

IP SETTING	
Format	SetNETWORK <1>-<2>-<3>-<4>
Description	<1>: IP address <2>: broadcast <3>: netmask <4>: port
Response	SetNETWORK Success
Fail Response	SetNETWORK Fail
Example	SetNETWORK 192.168.1.200-192.168.1.1- 255.255.0.0-4001 Response: >>SetNETWORK Success
IP SEARCHING	
Format	LstNETWORK
Response	IP, NETGATE and NETMASK
Fail Response	None
Example	LstNETWORK Response: >>IP:192.168.1.200-NETGATE:192.168.1.1- NETMASK:255.255.0.0-PORT:4001
ATTENIATION SETTING	
Format	SA n m
Description	n: number of attenuation m: attenuation value
Response	>> A1:2;<CR><LF>
Fail Response	>>A1:err;<CR><LF>
Example	SA<space>1<space> 2<CR><LF> Response: >>A1:2;
SITUATION OF CURRENT ATTENUATION	
Format	RA n
Description	n: number of attenuation
Response	>> RA1:2;<CR><LF>
Fail Response	>>RA1:err;<CR><LF>
Example	RA<space>1<CR><LF> Response: >>RA1:10;

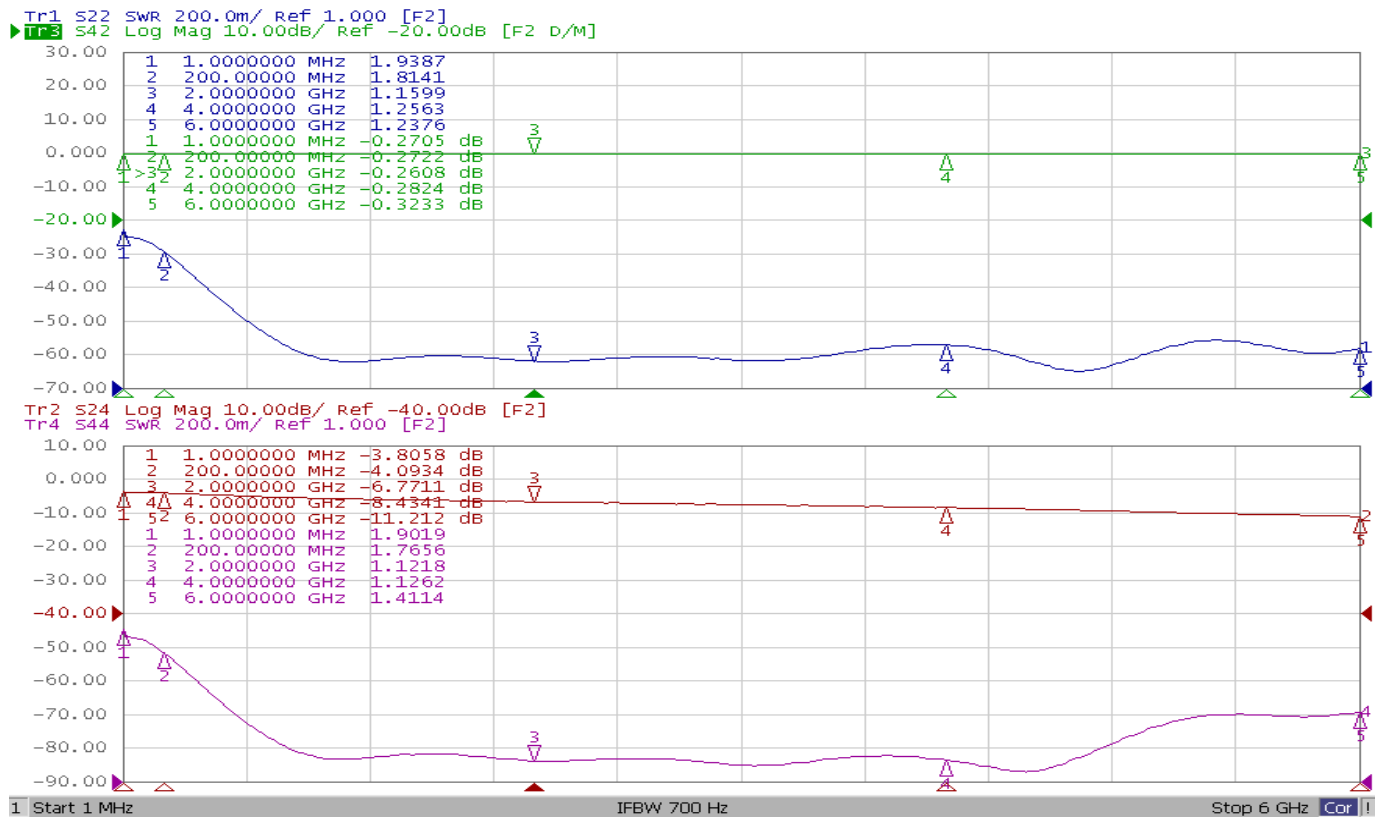
Programmable Attenuators System

(For reference only)

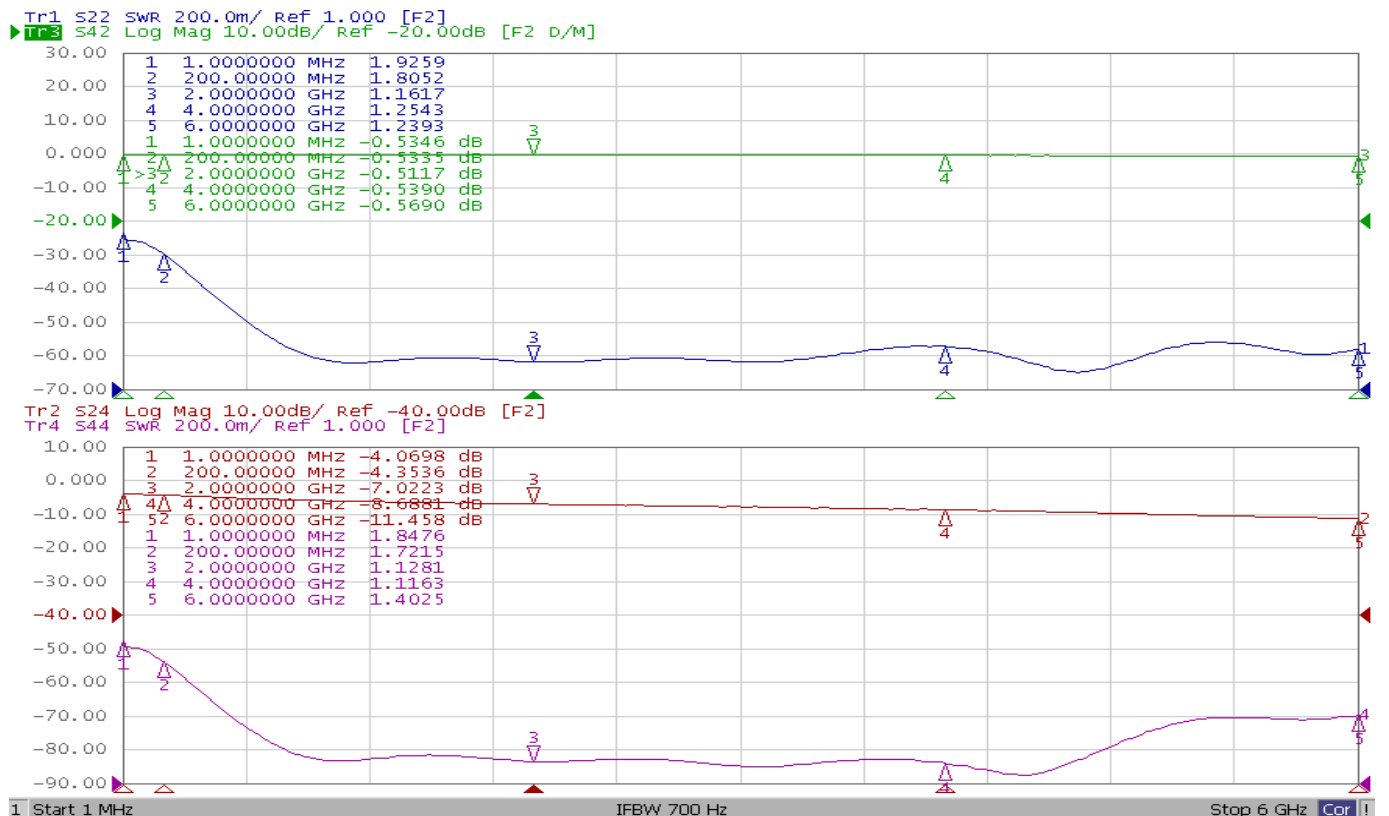


Typical Test Result

INSERTION LOSS (0.25dB)

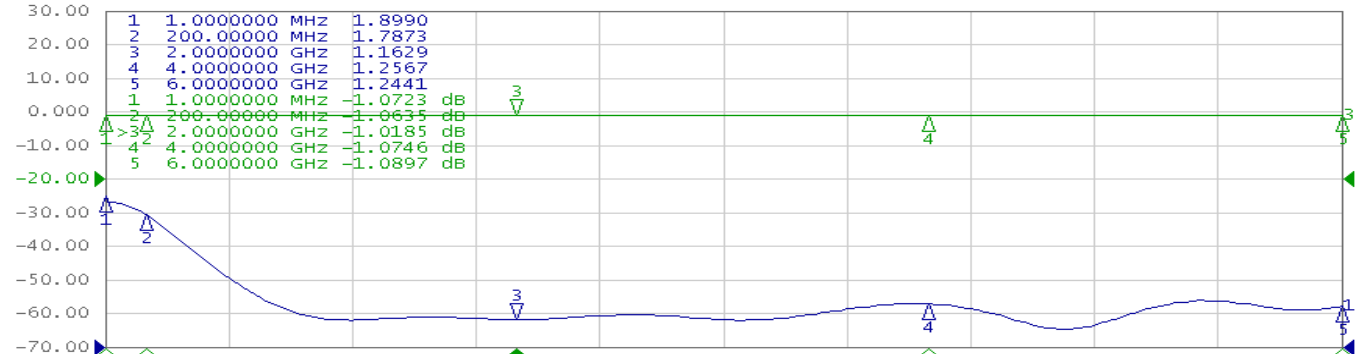


0.5dB

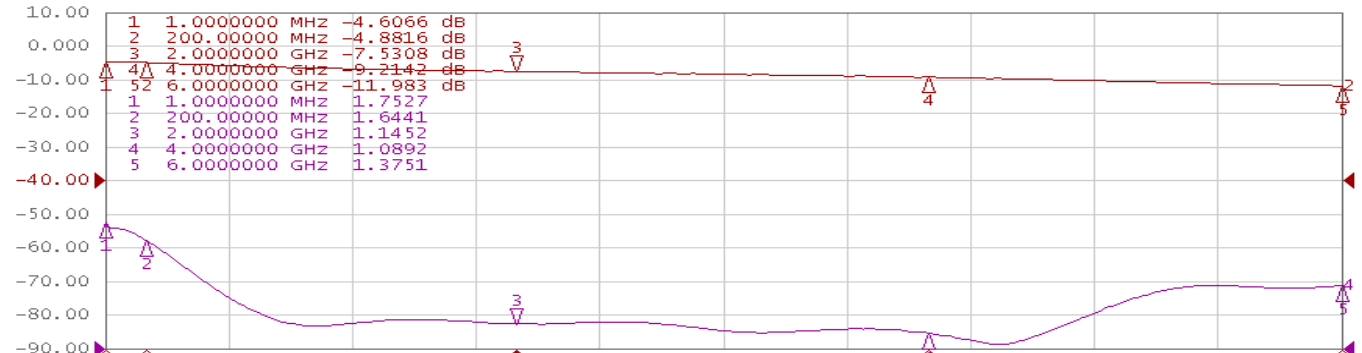


1dB

Tr1 S22 SWR 200.0m/ Ref 1.000 [F2]
Tr3 S42 Log Mag 10.00dB/ Ref -20.00dB [F2 D/M]



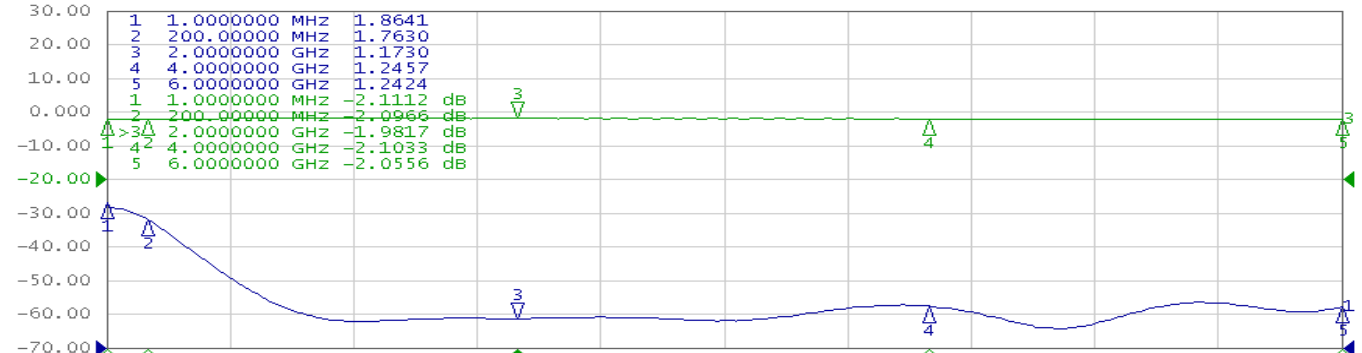
Tr2 S24 Log Mag 10.00dB/ Ref -40.00dB [F2]
Tr4 S44 SWR 200.0m/ Ref 1.000 [F2]



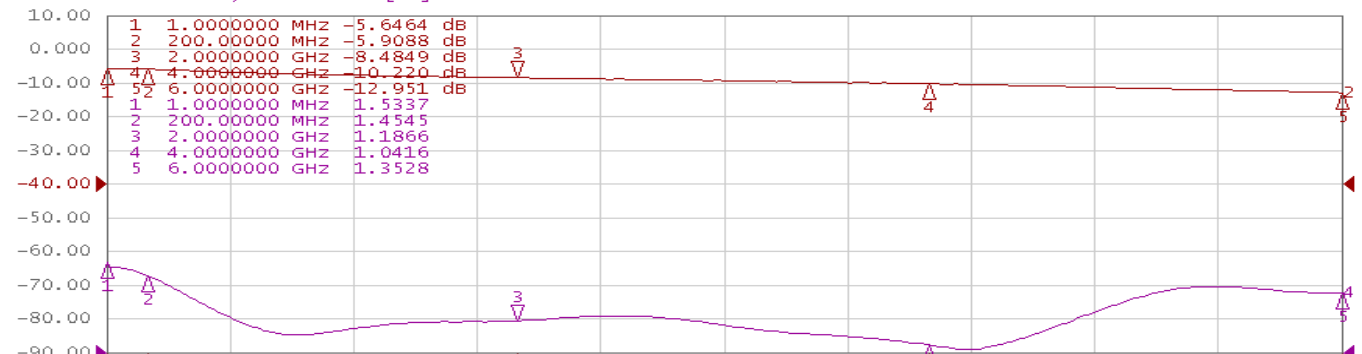
1 Start 1 MHz IFBW 700 Hz Stop 6 GHz Cor

2dB

Tr1 S22 SWR 200.0m/ Ref 1.000 [F2]
Tr3 S42 Log Mag 10.00dB/ Ref -20.00dB [F2 D/M]



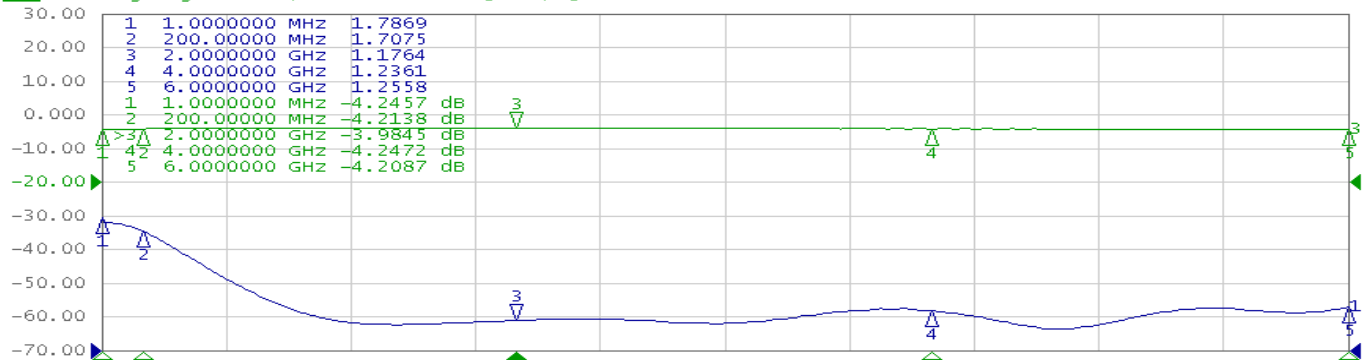
Tr2 S24 Log Mag 10.00dB/ Ref -40.00dB [F2]
Tr4 S44 SWR 200.0m/ Ref 1.000 [F2]



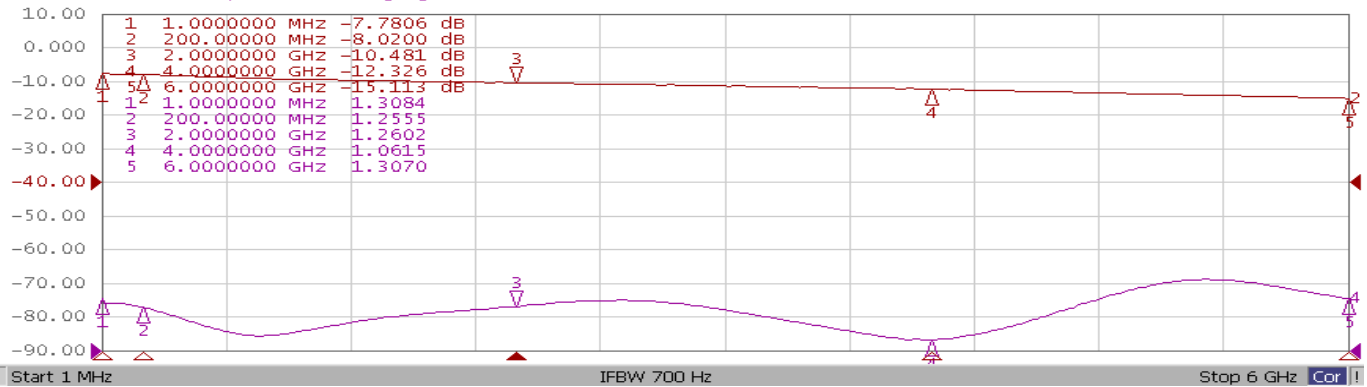
1 Start 1 MHz IFBW 700 Hz Stop 6 GHz Cor

4dB

Tr1 S22 SWR 200.0m/ Ref 1.000 [F2]
Tr3 S42 Log Mag 10.00dB/ Ref -20.00dB [F2 D/M]

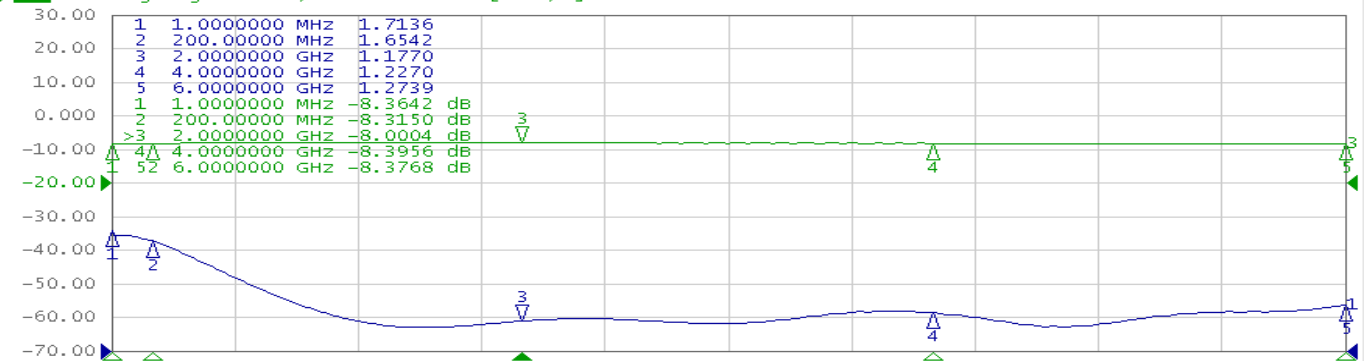


Tr2 S24 Log Mag 10.00dB/ Ref -40.00dB [F2]
Tr4 S44 SWR 200.0m/ Ref 1.000 [F2]



8dB

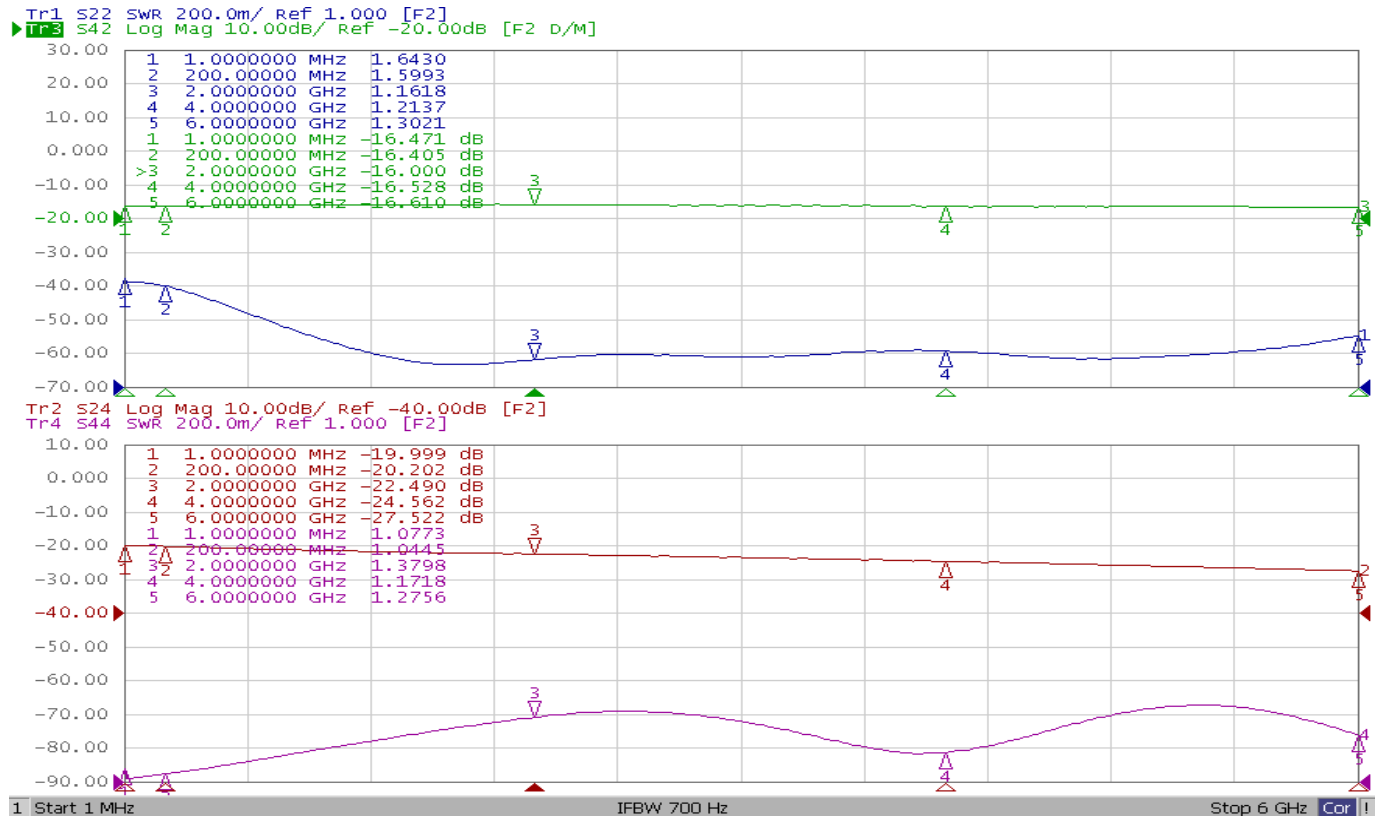
Tr1 S22 SWR 200.0m/ Ref 1.000 [F2]
Tr3 S42 Log Mag 10.00dB/ Ref -20.00dB [F2 D/M]



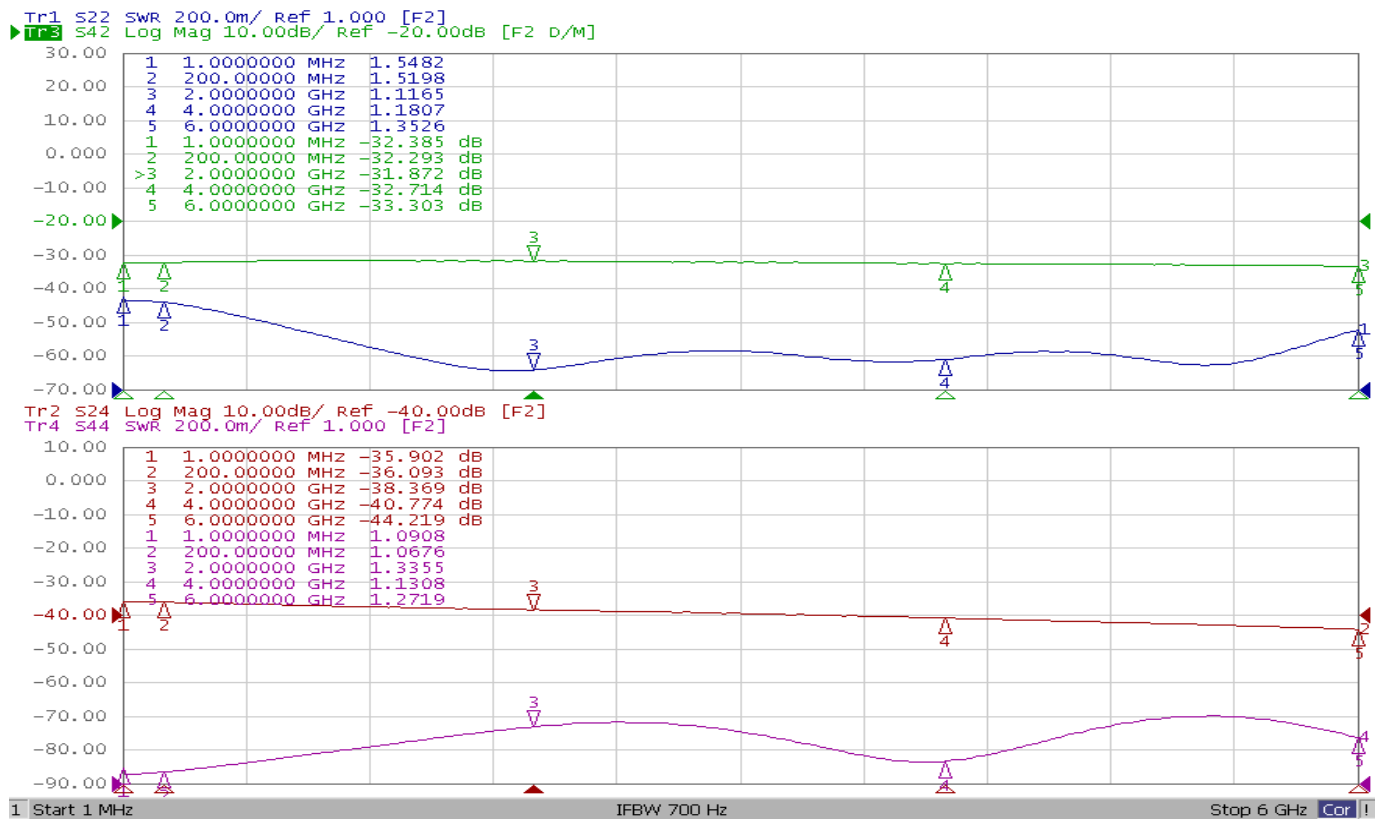
Tr2 S24 Log Mag 10.00dB/ Ref -40.00dB [F2]
Tr4 S44 SWR 200.0m/ Ref 1.000 [F2]



16dB

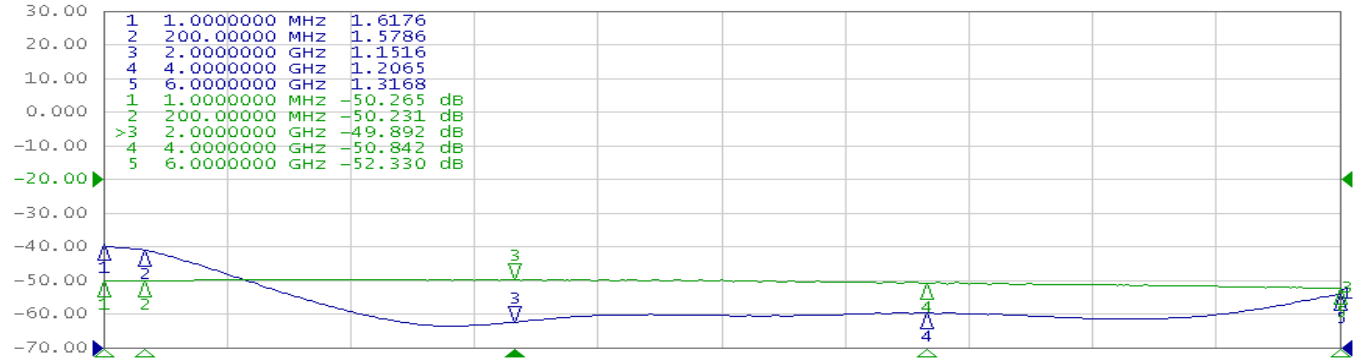


32dB

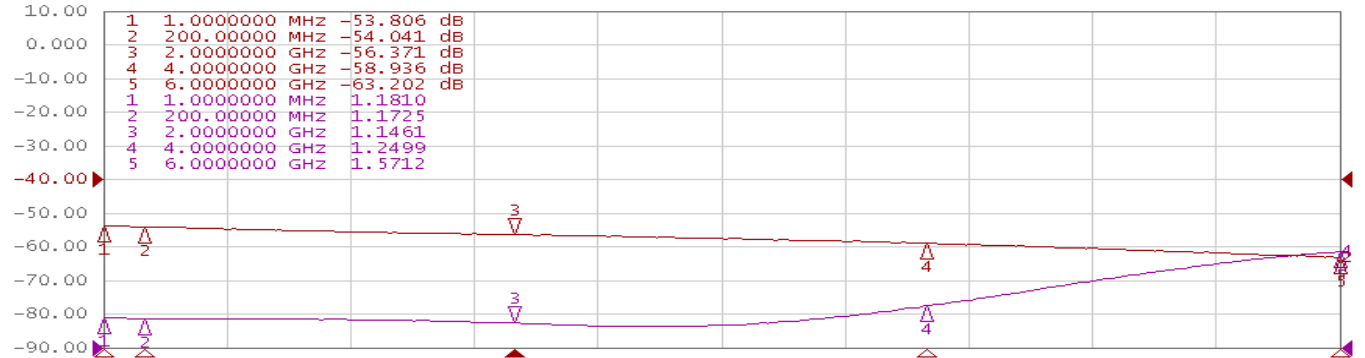


50dB

Tr1 S22 SWR 200.0m/ Ref 1.000 [F2]
Tr2 S42 Log Mag 10.00dB/ Ref -20.00dB [F2 D/M]



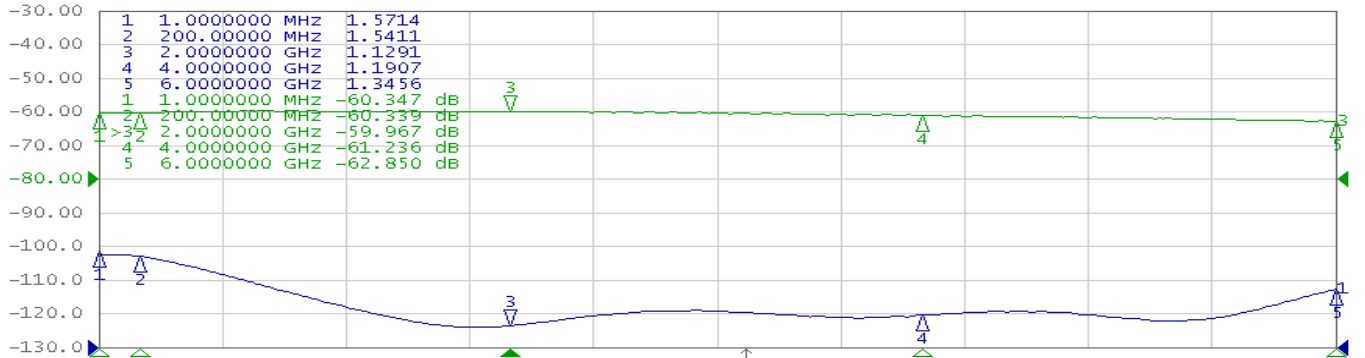
Tr2 S24 Log Mag 10.00dB/ Ref -40.00dB [F2]
Tr4 S44 SWR 200.0m/ Ref 1.000 [F2]



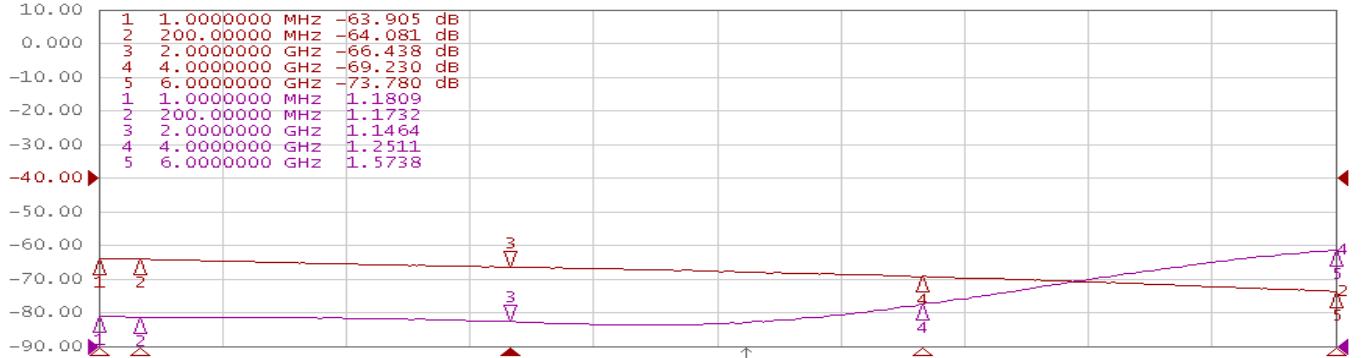
1 Start 1 MHz IFBW 700 Hz Stop 6 GHz Cor I

60dB

Tr1 S22 SWR 200.0m/ Ref 1.000 [F2]
Tr3 S42 Log Mag 10.00dB/ Ref -80.00dB [F2 D/M]

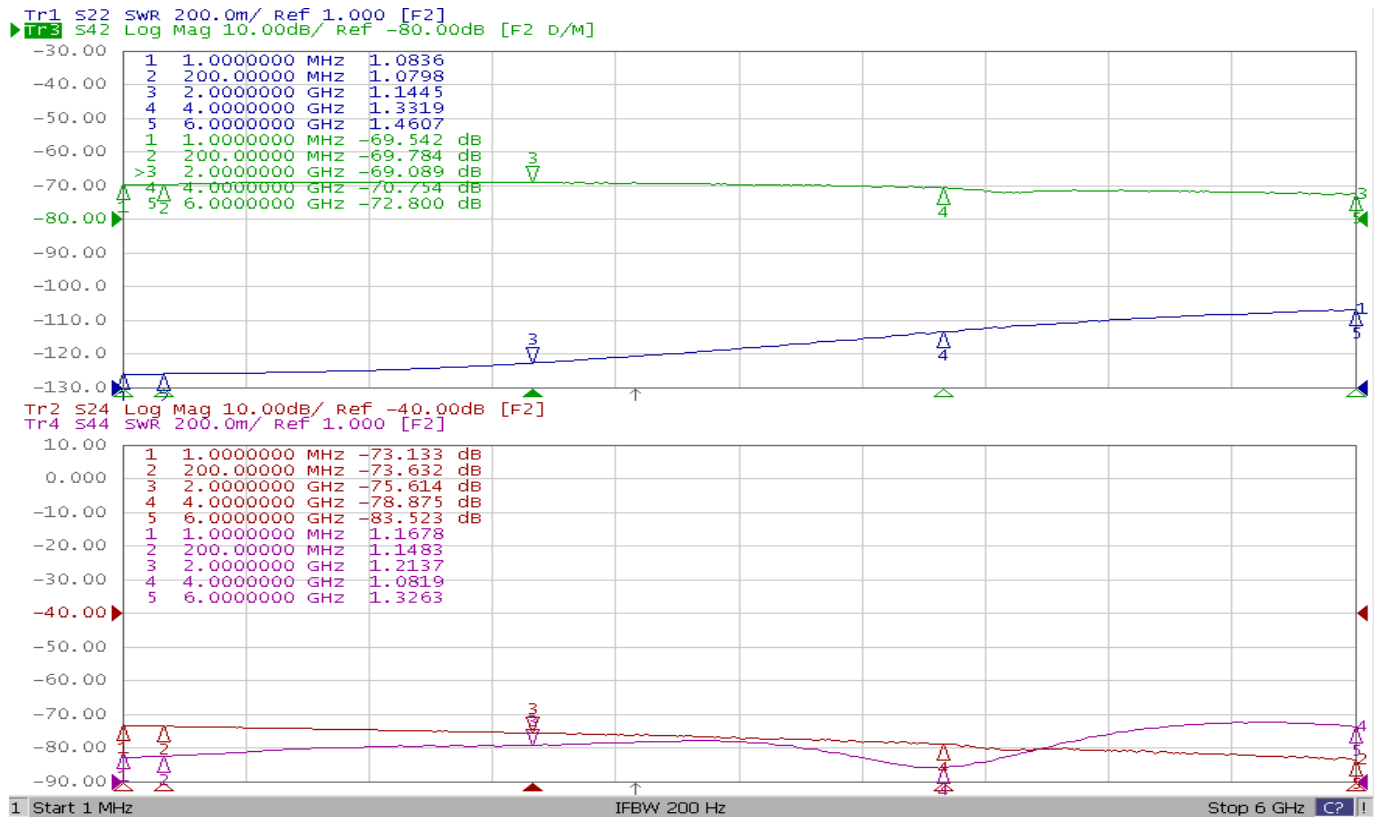


Tr2 S24 Log Mag 10.00dB/ Ref -40.00dB [F2]
Tr4 S44 SWR 200.0m/ Ref 1.000 [F2]



1 Start 1 MHz IFBW 200 Hz Stop 6 GHz C? I

70dB

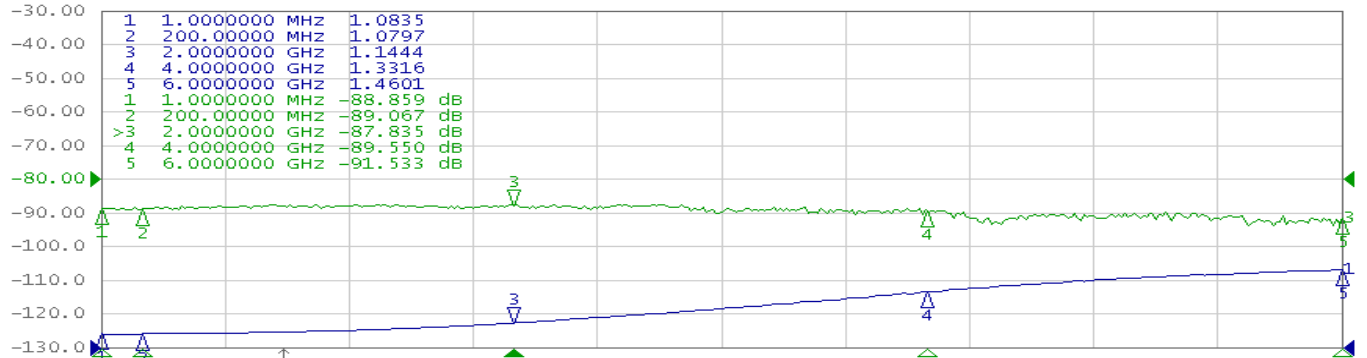


80dB

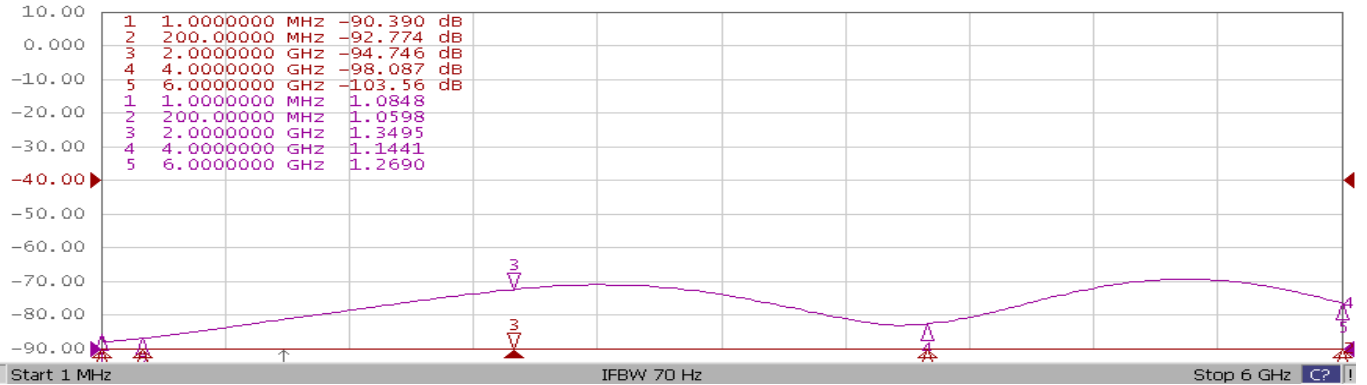


90dB

Tr1 S22 SWR 200.0m/ Ref 1.000 [F2]
Tr3 S42 Log Mag 10.00dB/ Ref -80.00dB [F2 D/M]

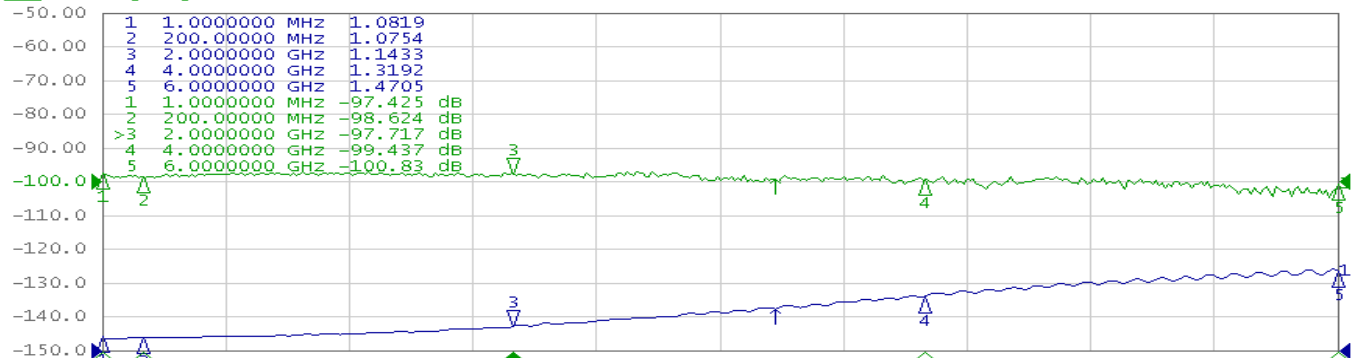


Tr2 S24 Log Mag 10.00dB/ Ref -40.00dB [F2]
Tr4 S44 SWR 200.0m/ Ref 1.000 [F2]



100dB

Tr1 S22 SWR 200.0m/ Ref 1.000 [F2]
Tr3 S42 Log Mag 10.00dB/ Ref -100.00dB [F2 D/M]



Tr2 S24 Log Mag 10.00dB/ Ref -40.00dB [F2]
Tr4 S44 SWR 200.0m/ Ref 1.000 [F2]

