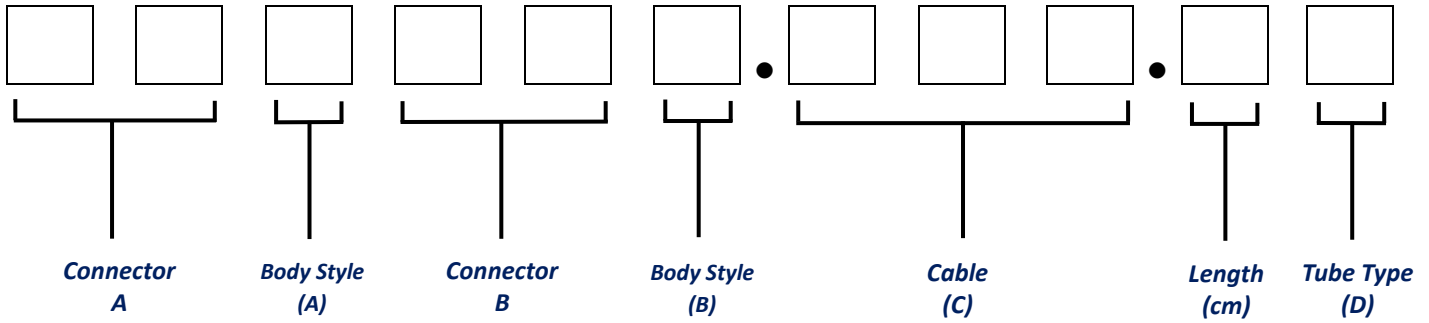


STANDARD COAXIAL CABLE ASSEMBLIES

MVE standard coaxial cable can provide not only inexpensive cost but also a lot of variety models to meet your needs. The overall diameter of flexible series is including, 2.59mm(RG316) , 2.93mm(RG316 Double Shielding), 0.085inch(F085/SS405), 0.141inch(F141/SS402); Semi-flex series are including: 0.085 inch(SF085/RG405), 0.141inch(SF141/RG402); Semi-rigid series are including: 0.034inch(SR034), 0.047 inch(SR047);0.085 inch(SR085); 0.141inch (SR141). In the meantime, MVE can offer customized services and support the optimization of cable assembly. With MVE service, customize product to let user easy to install. MVE is aimed to provide a wide range of performance coaxial cable for various demands.



No	Conn. A/B
10	1.85mm-M
11	1.85mm-F
12	2.4mm-M
13	2.4mm-F
14	2.9mm-M
15	2.9mm-F
16	3.5mm-M
17	3.5mm-F
18	APC7-M
19	APC7-F
20	BNC-M
21	BNC-F
22	MCX-M
23	MCX-F
24	MMCX-M
25	MMCX-F
26	N-M
27	N-F
28	SMA-M
29	SMA-F
30	SSMA-M
31	SSMA-F
32	TNC-M
33	TNC-F
34	MHF202781-M

No	Conn. A/B
35	75ΩBNC-M
36	75ΩBNC-F
37	MHF20311-M
38	75ΩF-M
39	75ΩF-F
40	MHF20367-M
41	MHF20448-M
42	75ΩN-M
43	75ΩN-F
44	75ΩSMB-M
45	75ΩSMB-F
46	MS147-M
47	MM8430-M
48	SMP-F
49	MHF20428-M
50	SMB-F
51	SMB-M
52	UHF-F
53	UHF-M
54	Fakra SMB-M
55	Fakra SMB-F
56	MM8030-M
57	7/16DIN-M
58	MS180-M
59	MS162-M

No	Conn. A/B
60	CRC9-M
61	MS162-M
62	SSMCX-M
63	SMPM-M
64	FAKRA-M
65	TS9A-M
66	MS156C-M
67	MHF20567-M
68	MS156-M
69	MM8930-M
No	Body Style
0	Standard
1	Reverse
2	Right angle
3	Quick
4	RP-Right angle
5	RP-Quick
6	Bulkhead
7	Opposite Direction R/A
8	2Hole Flange
9	RP-Bulkhead
A	Quick/No hex
B	4Hole Flange

No	Coaxial Cables ©
6	RG-6(U)
58	RG58(U)
59	RG59
081	Mini-coaxial 0.81mm
113	Mini-coaxial 1.13mm
137	Mini-coaxial 1.37mm
142	RG-142
174	RG-174
178	RG-178
214	RG-214
316	RG-316
316D	RG-316 Doubt Shield
400	RG-400
F085	SS405
F141	SS402
SF085	RG405
SF141	RG402
SF085JB	RG405(Blue Jacket)
SF141JB	RG402(Blue Jacket)
SPF085	SFL405
SPF141	SFL402
SR034	Semi-rigid 034
SR047	Semi-rigid 047
SR085	Semi-rigid RG405
SR141	Semi-rigid RG402
200LL	200LL,LMR200
400LL	400L,CFD400,LMR400
600LL	600LL,LMR600
2CS	AWG28 x2C
3CS	AWG28 x3C

Code(D)	A	B	C
Tube Type	Brass Tubing	Double Heat-shrink Tubing	Rigid Glued Tubing

COAXIAL CABLE

MCBL-F085.50

MULTI-FLEXIBLE(SS405)

Features

- ✓ Frequency up to 20GHz
- ✓ Excellent shielding effect
- ✓ Fully flexible for ease of installation
- ✓ Meet to Standard Mil-C-17



CONSTRUCTION		
ITEM	MATERIAL	DIAMETER
CENTER CONDUCTOR	SPCW	0.51 mm
DIELECTRIC	PTFE	1.63 mm
INNER SHIELD	SPCS	1.8 mm
OUTER SHIELD	SPC	2.18 mm
JACKET	FEP(Blue)	2.64 mm

ELECTRICAL DATA	
ITEM	SPECIFICATION
CUT-OFF FREQUENCY	20 GHz
IMPEDANCE	50 Ω
CAPACITANCE	96 pF/m
BENDIGN RADIU	6mm
TEST VOLTAGE	50000 Vrms @1Min
SHIELDING EFFECT	>-100 dB
WORKING VOLTAGE	1,500 Vrms (MAX.)
MIN. BENDING RADIUS	6 mm (Single)
VELOCITY OF PROPAGATION	70.0 %
TEMPERTURE	-55°C ~ +200°C
WEIGHT	19.1 kg/Km

MAXIMUM ATTENUATION		
FREQUENCY	ATTENUATION dB/m	ATTENUATION dB/ft
1GHz	0.75	0.229
3GHz	1.29	0.393
5GHz	1.71	0.521
10GHz	2.56	0.780
18GHz	3.57	1.088
20GHz	3.80	1.158



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



Cable Assembly Part Number

MVE PART NUMBER	CONNECTOR 1	CONNECTOR 2	XX- LENGTH (cm)	FREQUENCY (GHz)	VSWR
220222.F085.XX	MCX Male S/T	MCX Male R/A	15, 30, 50, 60, 90, 100	6.0	1.35
222222.F085.XX	MCX Male R/A	MCX Male R/A	15, 30, 50, 60, 90, 100	6.0	1.35
240280.F085.XX	MMCX Male S/T	SMA Male S/T	15, 30, 50, 60, 90, 100	6.0 8.0	1.30 -
240242.F085.XX	MMCX Male	MMCX Male R/A	15, 30, 50, 60, 90, 100	6.0	1.35
242280.F085.XX	MMCX Male R/A	SMA Male S/T	15, 30, 50, 60, 90, 100	6.0	1.30
242296.F085.XX	MMCX Male R/A	SMA Female B.H	15, 30, 50, 60, 90, 100	6.0	1.30
280280.F085.XX	SMA Male S/T	SMA Male S/T	30, 45, 50, 60, 90, 100	10.0	1.30
280280.F085.XX(H3)	SMA Male S/T	SMA Male S/T	30, 45, 50, 60, 90, 100	18.0	1.40
280280.F085.XX(H)	SMA Male S/T	SMA Male S/T	30, 45, 50, 60, 90, 100	18.0	1.35
280281.F085.XX	SMA Male S/T	SMA Male (RP) S/T	30, 45, 50, 60, 90, 100	6.0	1.30
280282.F085.XX	SMA Male S/T	SMA Male R/A	30, 45, 50, 60, 90, 100	6.0	1.30
280290.F085.XX	SMA Male S/T	SMA Female S/T	30, 45, 50, 60, 90, 100	10.0	1.30
280291.F085.XX	SMA Male S/T	SMA Female (RP) S/T	30, 45, 50, 60, 90, 100	10.0	1.30
280296.F085.XX	SMA Male S/T	SMA Female B.H	30, 45, 50, 60, 90, 100	10.0	1.35
282282.F085.XX	SMA Male R/A	SMA Male R/A	30, 45, 50, 60, 90, 100	6.0	1.30
290482.F085.XX(H3)	SMA Female S/T	SMP Female R/A	30, 45, 50, 60, 90, 100	12.4	1.40
342280.F085.XX	MHF1	SMA Male S/T	15, 30, 50, 60, 90, 100	8.0	1.50
342296.F085.XX	MHF1	SMA Female B.H	15, 30, 50, 60, 90, 100	8.0	1.50
480280.F085.XX(H)	SMP Female S/T	SMA Male S/T	15, 30, 50, 60, 90, 100	18.0	1.40
480280.F085.XX(H3)	SMP Female S/T	SMA Male S/T	15, 30, 50, 60, 90, 100	18.0	1.40
480290.F085.XX(H3)	SMP Female S/T	SMP Female S/T	15, 30, 50, 60, 90, 100	12.4	1.40
482482.F085.XX	SMP Female R/A	SMP Female R/A	15, 30, 50, 60, 90, 100	6.0	1.40



***Definition of Length: "XX"**

Length $\leq 30\text{CM}$, the length cable is referring to exclude two terminal length of connector.

Length $> 30\text{CM}$, the length cable is referring to include two terminal length of connector.

****Definition of Tolerance**

Length $\leq 10\text{cm}$: $\pm 0.5\text{cm}$, Length $\leq 30\text{cm}$: $\pm 1.0\text{ cm}$, Length $\leq 50\text{cm}$: $\pm 2.0\text{ cm}$,

Length $\leq 100\text{cm}$: $\pm 2.5\text{ cm}$, Length $> 101\text{cm}$: $\pm 3.0\text{cm}$

*****Estimate of Cable Assembly loss**

Cable assembly loss = Connector loss + Assembly loss + Cable loss

Connector Loss: $0.08 \times \sqrt{\text{Frequency}} \times 2$ (2 connectors)

Assembly Loss : $0.12 \times 2(\text{sides})$

Cable Loss: per cable attenuation (Max.) * Cable length

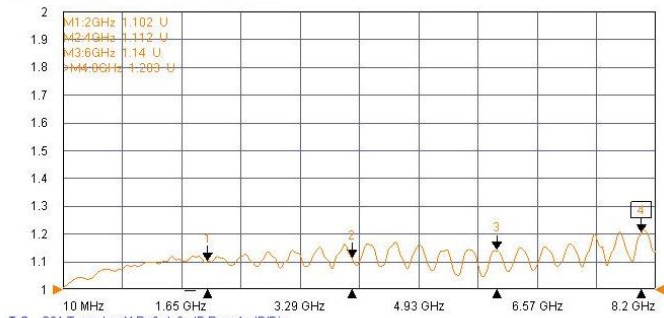
NOTES:

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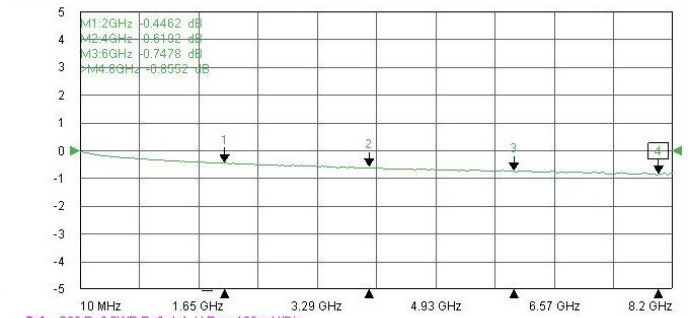
Typical Test Result

PART NUMBER	DESCRIPTION
240280.F085.30A	MMCX Male To SMA Male, Flexible 085 Blue/L:30cm/Brass Tubing

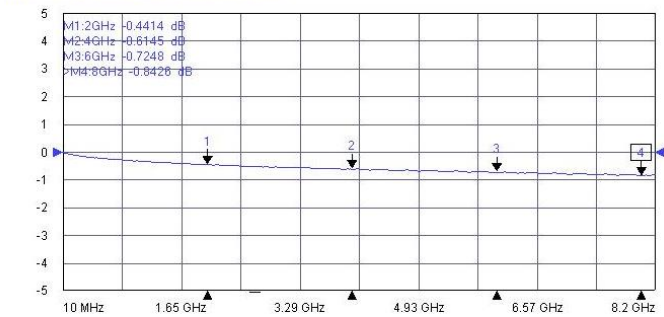
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



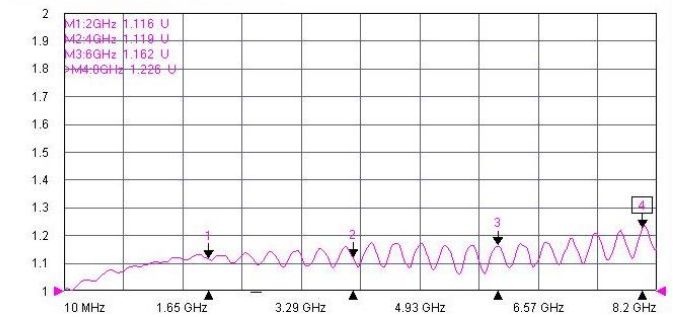
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



Tr3 S21 Trans LogM RefLvl: 0 dB Res: 1 dB/Div

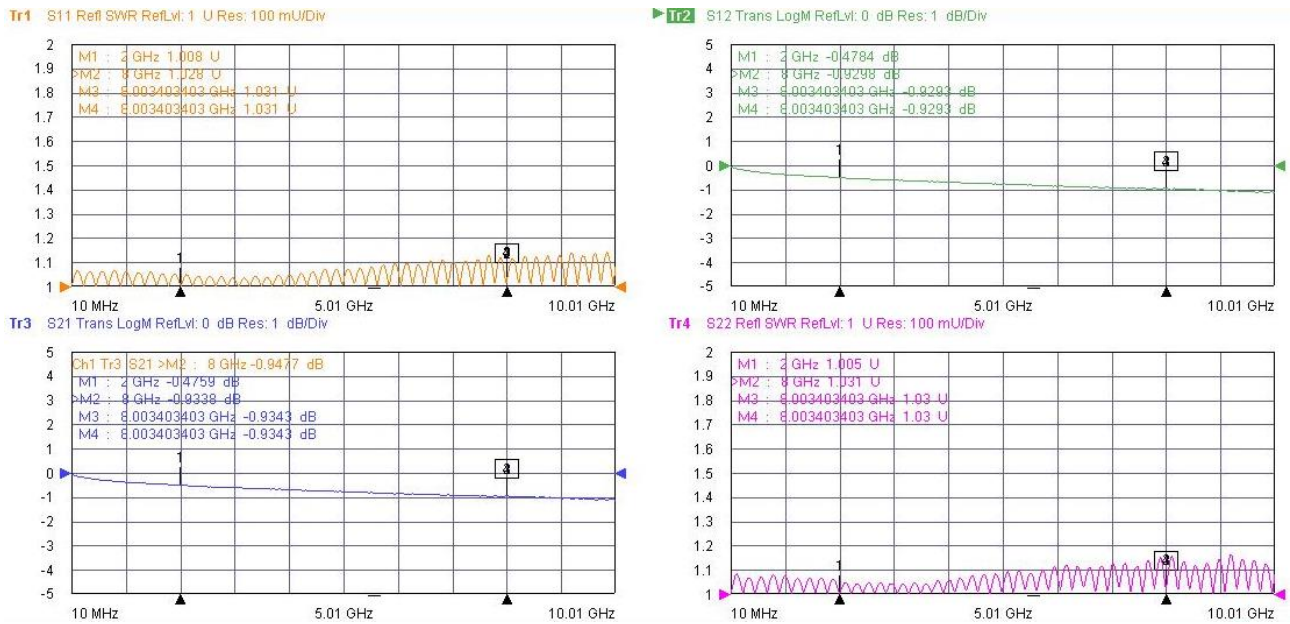


Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



Typical Test Result

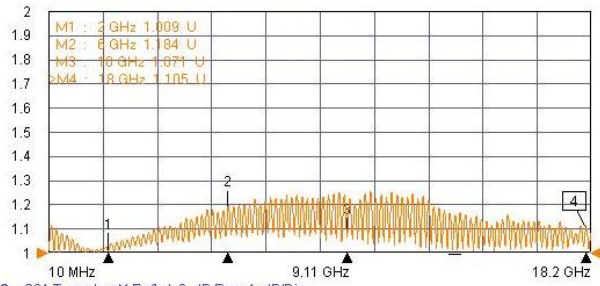
PART NUMBER	DESCRIPTION
280280.F085.50A	SMA Male To SMA Male, Flexible 085 Blue/L:50cm/Brass Tubing



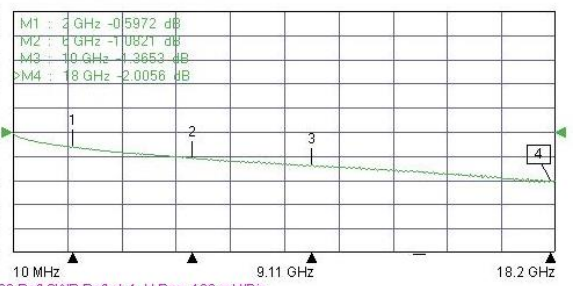
Typical Test Result

PART NUMBER	DESCRIPTION
280280.F085.60A(H3)	SMA Male/Stainless To SMA Male/Stainless, Flexible 085 Blue/L:60cm, DC-18GHz/Brass Tubing

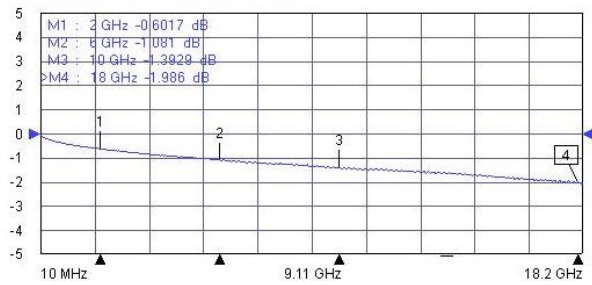
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



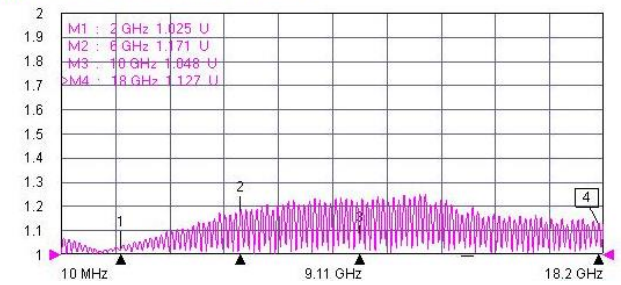
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



Tr3 S21 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



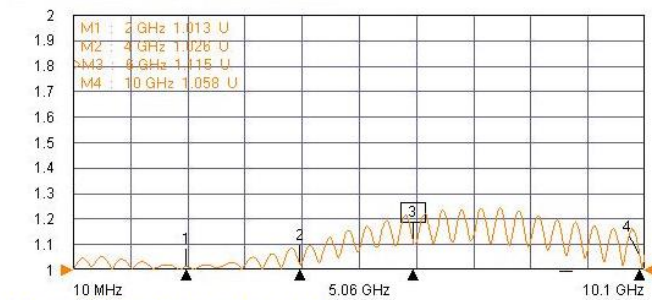
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



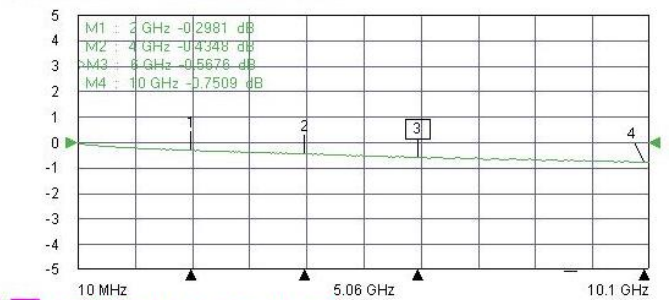
Typical Test Result

PART NUMBER	DESCRIPTION
280291.F085.30A	SMA Male To SMA Female Reverse, Flexible 085 Blue/L:30cm/Brass Tubing

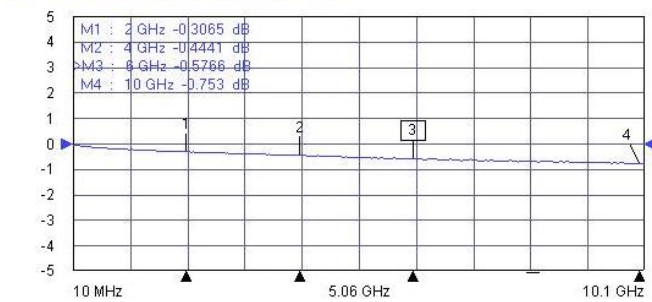
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



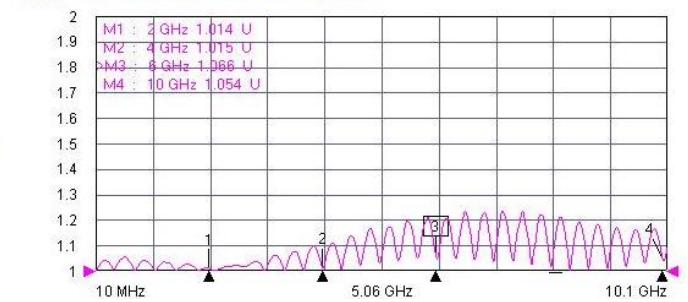
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



Tr3 S21 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



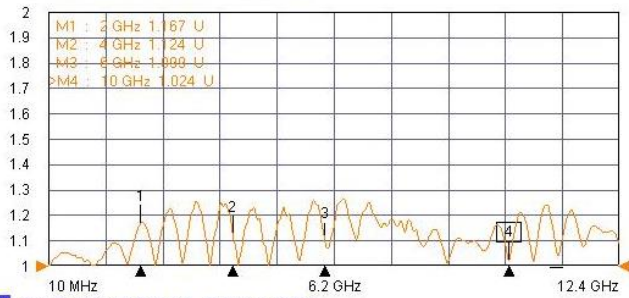
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



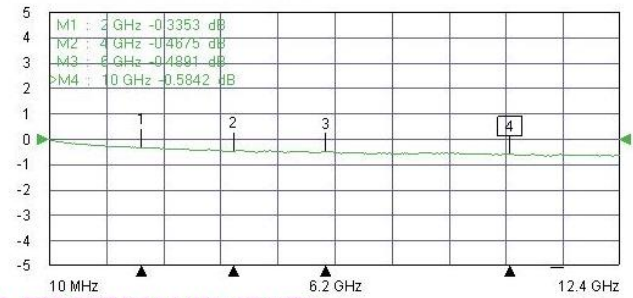
Typical Test Result

PART NUMBER	DESCRIPTION
482482.F085.15A	SMP Female R/A To SMP Female R/A, Flexible O85 Blue/ L:15cm/Brass Tubing

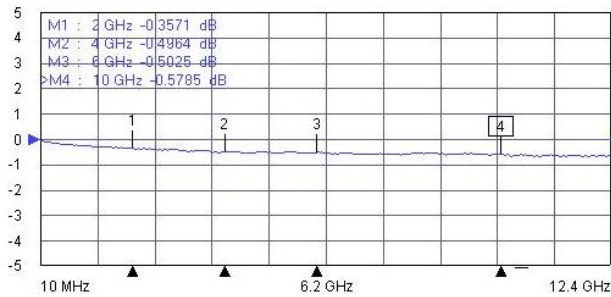
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



Tr3 S21 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div

