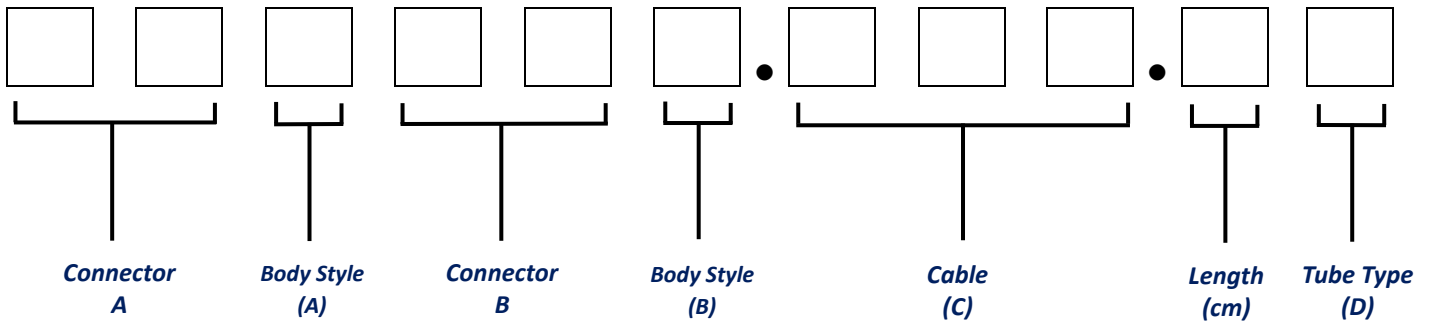


## STANDARD COAXIAL CABLE ASSEMBLIES

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-137.50

1.37mm(Black)

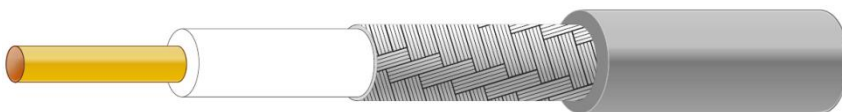
### Features

- ✓ Frequency up to 6 GHz
- ✓ Low signal attenuation
- ✓ Convenient assembly



### Specifications

CONSTRUCTION		
ITEM	MATERIAL	DIAMETER
CENTER CONDUCTOR	Silver-Coated Copper	0.31 mm
INSULATION	FEP	0.92 ± 0.03 mm
BRAID SHIELD (Coverage:95%)	Tinned-Coated Copper	1.15 ± 0.05 mm
JACKET	FEP	1.37 ±0.05mm
ELECTRICAL DATA		
ITEM	SPECIFICATION	
OPERATING FREQUENCY	6GHz	
BEDNING RADIUS	5mm Min.(Static)	
CAPACITANCE	96 pF/M ± 3pF/M	
DIELECTRICE STRENGTH	AC 1KV/Minute	
NOM. VEL. OF PROP.	70%	
OPETATING TEMP.	-55 ~ + 150°C	
BRAID SHIELD COVERAGE	95%	
MAXIMUM ATTENUATION		
FREQUENCY	ATTENUATION dB/1M	
1.8GHz	2.2	
2.4GHZ	2.6	
5.2GHz	3.9	
5.8GHz	4.3	
6.0GHz	4.8	



| Conductor | Insulation | Shield | Jacket

#### 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 (TYP.)
240280.137.XX	MMCX Male S/T	SMA Male S/T	30, 40, 50, 60, 80	6.0	1.30
242280.137.XX	MMCX Male R/A	SMA Male S/T	30, 40, 50, 60, 80	6.0	1.35
242296.137.XX	MMCX Male R/A	SMA Female B.H	30, 40, 50, 60, 80	6.0	1.35
280280.137.XX	SMA Male S/T	SMA Male S/T	30, 40, 50, 60, 80	6.0	1.30
280282.137.XX	SMA Male S/T	SMA Male R/A	30, 40, 50, 60, 100	6.0	1.35
280282.137.XX(H)	SMA Male S/T	SMA Male R/A	30, 40, 50, 60, 100	8.0	1.50
280SXX.137.XX	SMA Male S/T	Stripped	30, 40, 50, 60, 100	6.0	-
282292H.137.XX	SMA Male R/A	SMA Female 2 Hole	30, 40, 50, 60, 100	8.0	1.50
296SXX.137.XX	SMA Female B.H	Stripped	30, 40, 50, 60, 100	6.0	-
342280.137.XX	MHF(20351-112R)	SMA Male S/T	30, 40, 50, 60, 100	6.0	1.40
342280.137.XX(H)	MHF(20351-112R)	SMA Male S/T	30, 40, 50, 60, 100	8.0	1.40
342282.137.XX	MHF(20351-112R)	SMA Male R/A	30, 40, 50, 60, 100	6.0	1.40
342282.137.XX(H)	MHF(20351-112R)	SMA Male R/A	30, 40, 50, 60, 100	8.0	1.50
342296.137.XX	MHF(20351-112R)	SMA Female B.H	30, 40, 50, 60, 100	6.0	1.40
342296.137.XX(H)	MHF(20351-112R)	SMA Female B.H	30, 40, 50, 60, 100	8.0	1.40
342299.137.XX	MHF(20351-112R)	SMA Female(RP) B.H	30, 40, 50, 60, 80	6.0	1.40
412L280.137.XX	MHF4L(20632-112R)	SMA Male S/T	30, 40, 50, 60, 100	6.0	1.40
412L280.137.XX(H)	MHF4L(20632-112R)	SMA Male S/T	30, 40, 50, 60, 100	8.0	1.40
412L291.137.XX	MHF4L(20632-112R)	SMA Female Reverse	30, 40, 50, 60, 100	6.0	1.40
412L296.137.XX	MHF4L(20632-112R)	SMA Female B.H	30, 40, 50, 60, 100	6.0	1.40
412L296.137.XX(H)	MHF4L(20632-112R)	SMA Female B.H	30, 40, 50, 60, 100	8.0	1.40
472280.137.XXB	MM8430	SMA Male S/T	30, 40, 50, 60, 100	6.0	1.80
472296.137.XXB	MM8430	SMA Female B.H	30, 40, 50, 60, 100	6.0	1.80
562296.137.XXB	MM8030	SMA Female B.H	30, 40, 50, 60, 100	6.0	1.80
672P296.137.XX	MFH5/X.FL	SMA Female S/T	30, 40, 50, 60, 100	6.0	1.50



**\*Definition of Length: “ XX ”**

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

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

**\*\*Definition of Tolerance**

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

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

**\*\*\*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 :  $0.12 \times 2$ (sides)

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

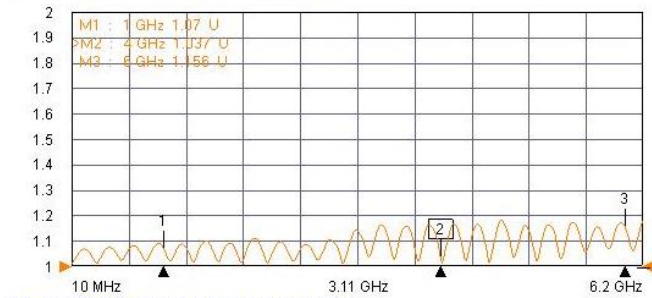
NOTES:

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

## Typical Test Result

PART NUMBER	DESCRIPTION
240280.137.40A	MMCX Male To SMA Male ,1.37 Black/L:40cm

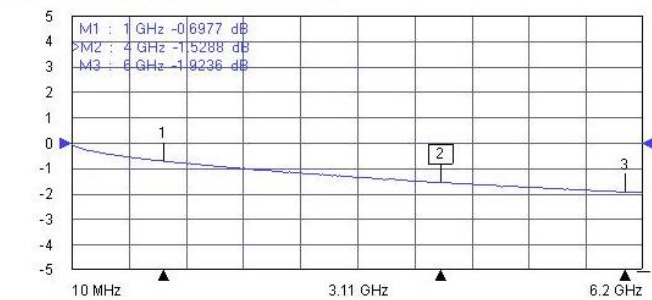
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



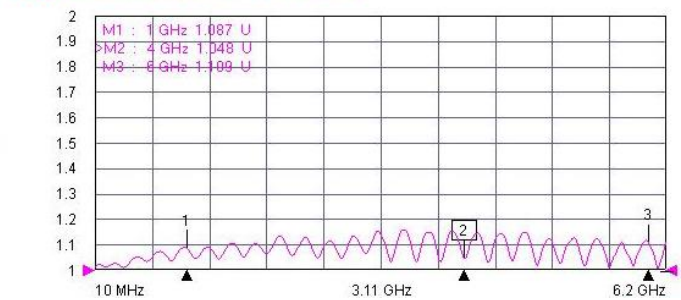
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



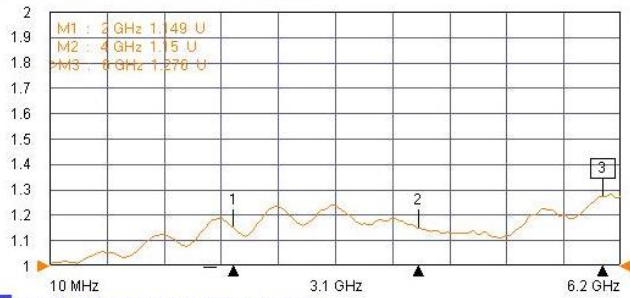
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



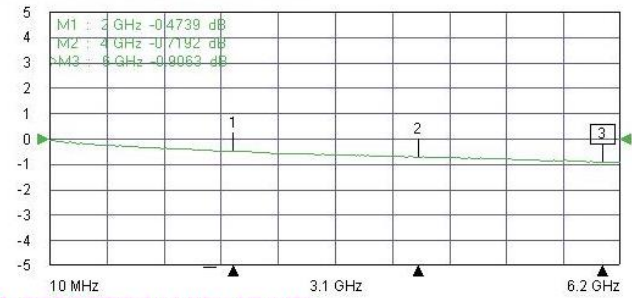
## Typical Test Result

PART NUMBER	DESCRIPTION
242296.137.15A	MMCX Male R/A To SMA Female B.H, 1.37mm/L:15cm/Brass Tubing

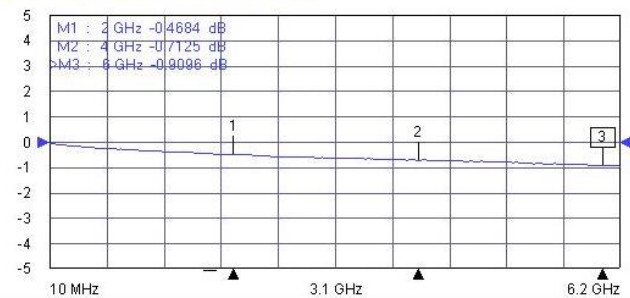
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



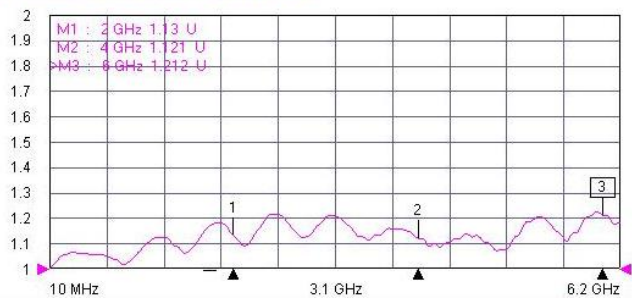
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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

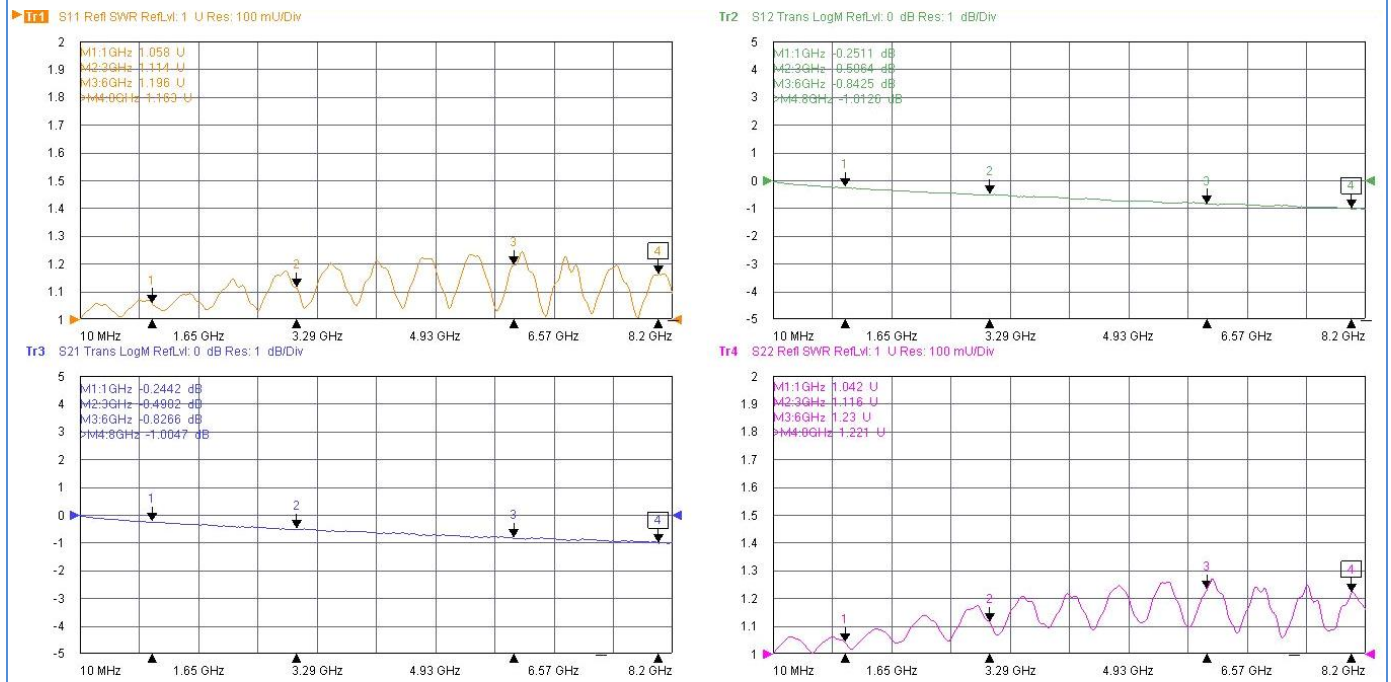


Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



## Typical Test Result

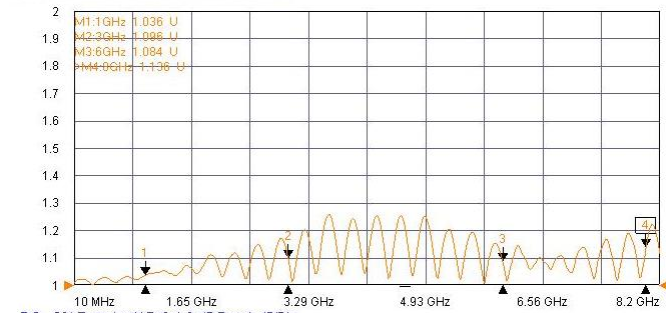
PART NUMBER	DESCRIPTION
342280.137.15(H)	MHF 20351-112R To SMA Male, 1.37mm /L:15cm



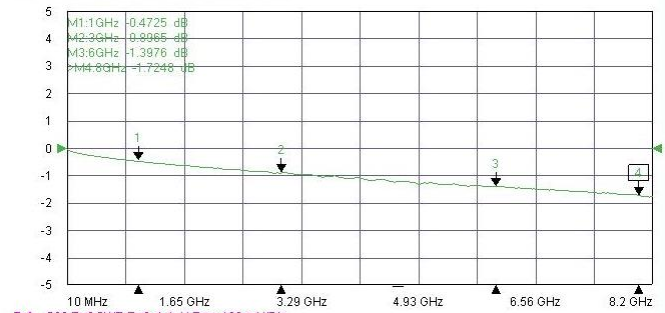
## Typical Test Result

PART NUMBER	DESCRIPTION
342296.137.30(H)	MHF 20351-112R To SMA Female BH, 1.37mm/L:30cm/DC-8GHz

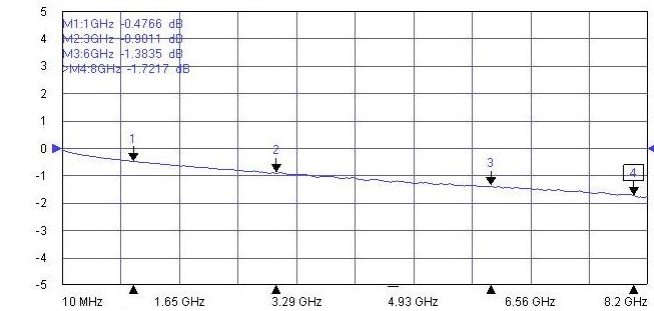
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



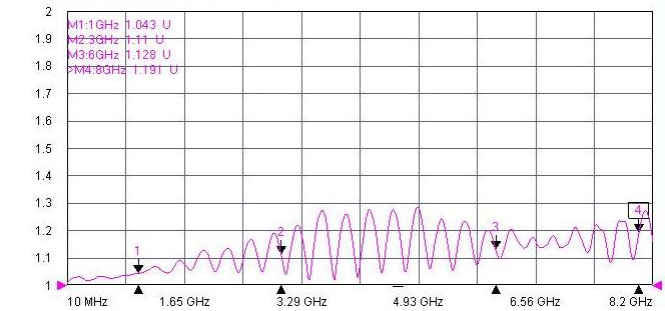
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



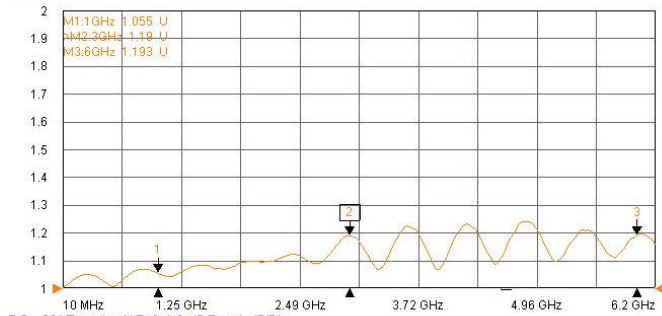
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



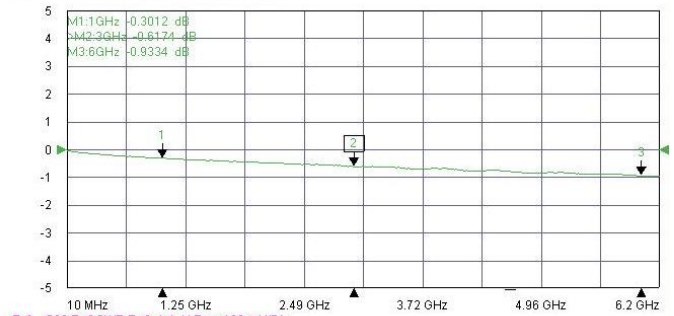
## Typical Test Result

PART NUMBER	DESCRIPTION
342299.137.15	MHF 20351-112R To SMA Female Reverse BH, 1.37 Black/L:15cm

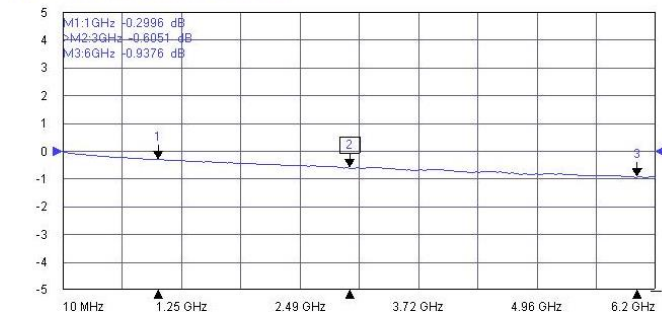
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



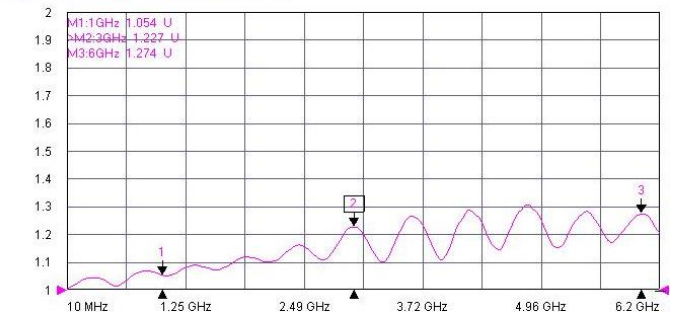
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



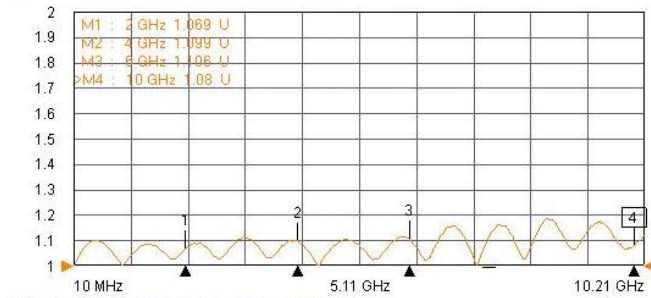
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



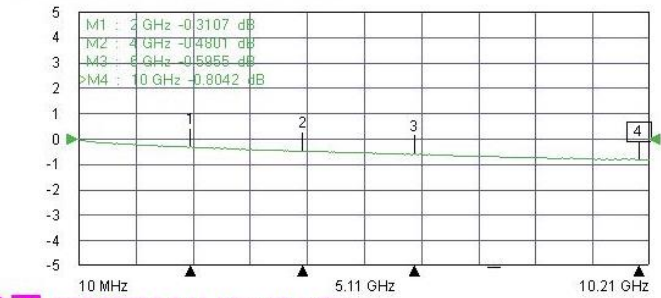
## Typical Test Result

PART NUMBER	DESCRIPTION
412L280.137.10(H)	MHF4L 20632-001R To SMA Male, 1.37mm Black/L:10cm/DC-10GHz

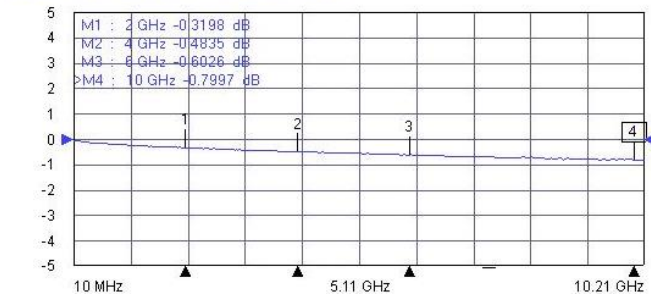
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



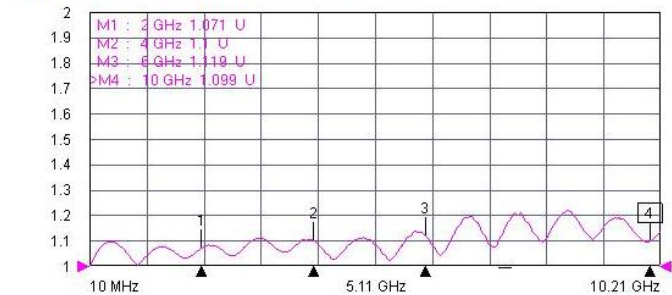
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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

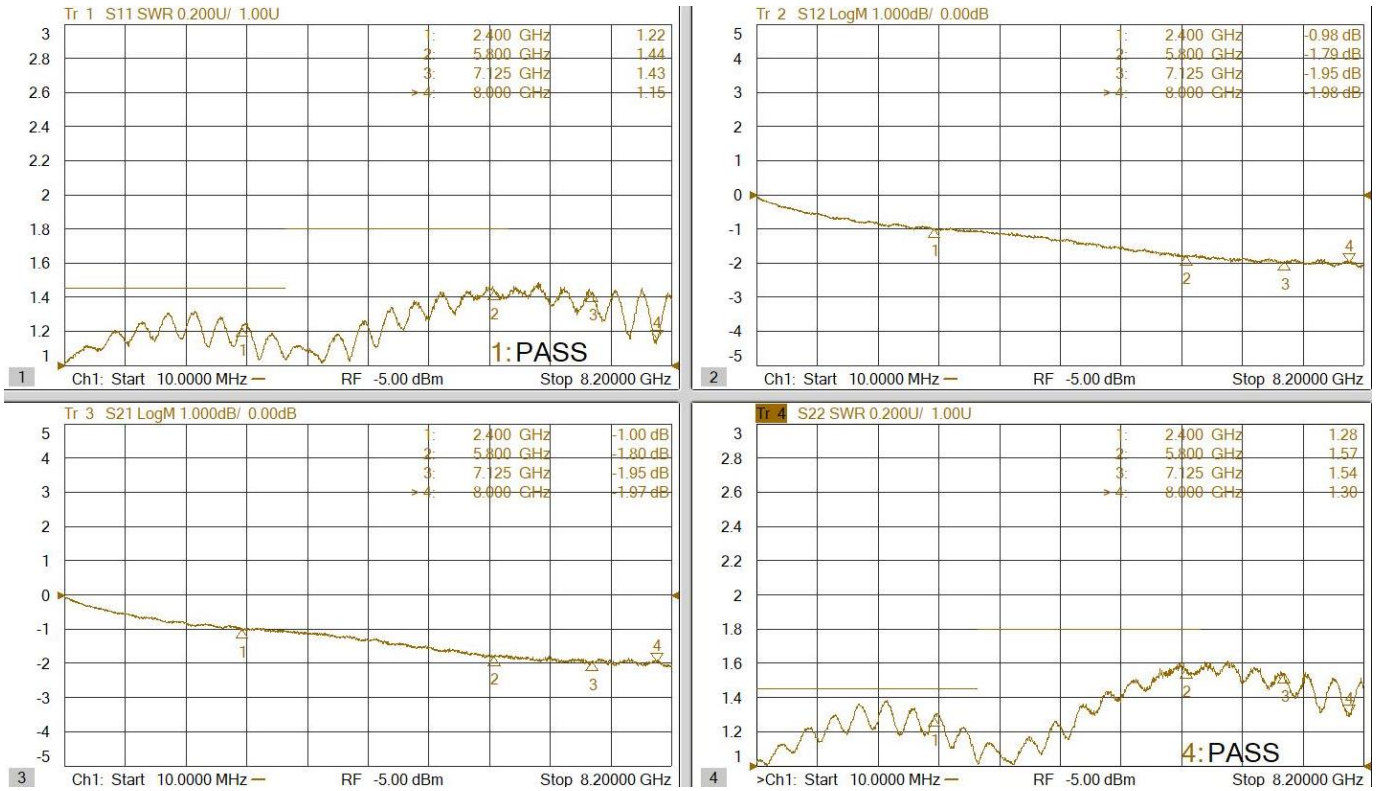


Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



## Typical Test Result

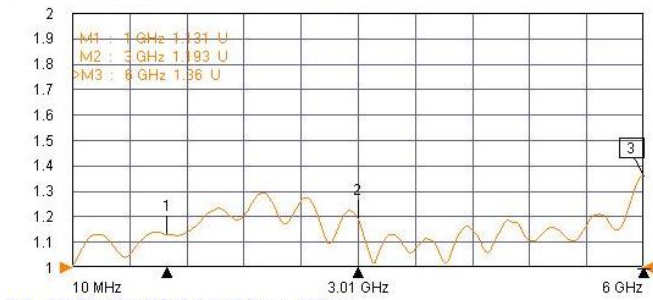
PART NUMBER	DESCRIPTION
472296.137.30B	50ohm RSW8430 R/A To SMA Female B.H, 1.37 Black/L:30cm



## Typical Test Result

PART NUMBER	DESCRIPTION
562296.137.20B	50ohm RSW MM8030 Male R/A To SMA Female B.H, 1.37 Black/L:20cm

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



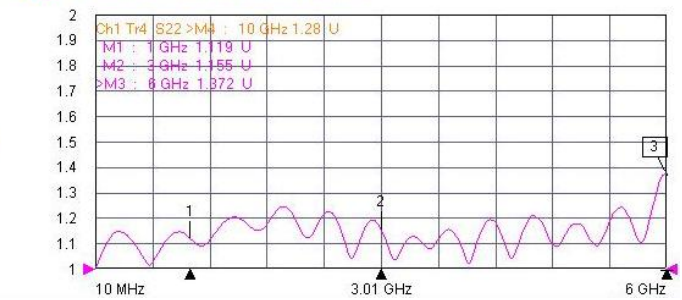
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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
672P296.137.15A	MFH5/X.FL Probe to SMA Female,1.37mm Black/L:15cm

