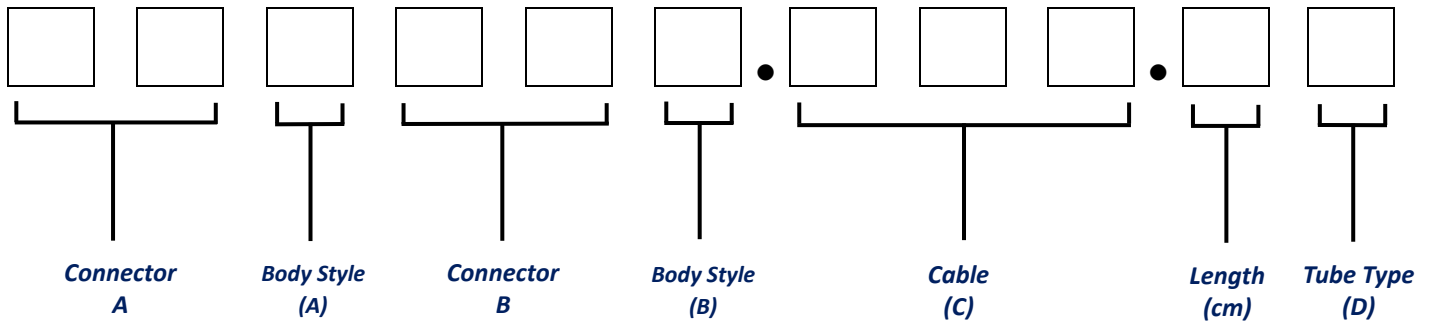


STANDARD COAXIAL CABLE ASSEMBLIES

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-316D.50

RG316 Double Shielding

MIL-C-17

Features

- ✓ Frequency up to 12.4GHz
- ✓ Low signal attenuation
- ✓ Convenient assembly



Specifications

CONSTRUCTION		
ITEM	MATERIAL	DIAMETER
CENTER CONDUCTOR	Silver-Coated Copper Clad Steel	0.51 mm
INSULATION	FEP	1.52 mm
BRAID SHIELD 1(Coverage: 95%)	Silver-Coated Copper	2.0 mm
BRAID SHIELD 2 (Coverage: 86%)	Silver-Coated Copper	2.45 mm
JACKET	FEP	2.95mm
ELECTRICAL DATA		
ITEM	SPECIFICATION	
CUT-OFF FREQUENCY	12.4GHz	
INSULATION RESISTANCE	100 MEGA OHM / KM MIN.	
DIELECTRIC STRENGTH	AC 1.0KV / Minute	
NOM. IMPEDANCE	50 ± 2 Ohms	
NOM. CAPACITANCE	95.8±3 Pf/m	
NOM. VEL. OF PROP	69.5%	
TEMPTURE	-40°C ~ 125°C	
Weight	23 Kg/km	
MAXIMUM ATTENUATION		
FREQUENCY	ATTENUATION (dB/1M)	
500MHz	0.59	
1GHz	1.26	
3GHz	1.72	
5GHz	2.15	
10GHz	2.82	



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.)
200200.316D.XX	BNC Male S/T	BNC Male S/T	30, 40, 50, 60, 100	3.0	--
200280.316D.XX	BNC Male S/T	SMA Male S/T	30, 40, 50, 60, 100	3.0	--
200510.316D.XX	BNC Male S/T	SMB Male S/T	30, 40, 50, 60, 100	4.0	--
220240.316D.XX	MCX Male S/T	MMCX Male S/T	30, 40, 50, 60, 100	3.0	1.40
220280.316D.XX	MCX Male S/T	SMA Male S/T	30, 40, 50, 60, 100	3.0	1.50
220510.316D.XX	MCX Male S/T	SMB Male S/T	30, 40, 50, 60, 100	3.0	--
222240.316D.XX	MCX Male R/A	MMCX Male S/T	30, 40, 50, 60, 100	6.0	1.50
222242.316D.XX	MCX Male R/A	MMCX Male R/A	30, 40, 50, 60, 100	6.0	1.50
240280.316D.XX	MMCX Male S/T	SMA Male S/T	30, 40, 50, 60, 100	6.0	1.50
240282.316D.XX	MMCX Male S/T	SMA Male R/A	30, 40, 50, 60, 100	3.0	1.50
242242.316D.XX	MMCX Male R/A	MMCX Male R/A	30, 40, 50, 60, 100	6.0	1.50
242280.316D.XX	MMCX Male R/A	SMA Male S/T	30, 40, 50, 60, 100	6.0	1.50
242290.316D.XX	MMCX Male R/A	SMA Female S/T	30, 40, 50, 60, 100	6.0	1.40
280SXX.316D.XX	SMA Male S/T	Stripped(X/X/Xmm)	30, 40, 50, 60, 100	--	--
280280.316D.XX	SMA Male S/T	SMA Male S/T	30, 40, 50, 60, 100	6.0	1.50
280281.316D.XX	SMA Male S/T	SMA Male (RP) S/T	30, 40, 50, 60, 100	6.0	1.50
280500.316D.XX	SMA Male S/T	SMB Female S/T	30, 40, 50, 60, 100	6.0	1.50
280510.316D.XX	SMA Male S/T	SMB Male S/T	30, 40, 50, 60, 100	3.0	--
280512.316D.XX	SMA Male S/T	SMB Male R/A	30, 40, 50, 60, 100	3.0	--
282282.316D.XX	SMA Male R/A	SMA Male R/A	30, 40, 50, 60, 100	3.0	1.50
290SXX.316D.XX	SMA Female S/T	Stripped(X/X/Xmm)	30, 40, 50, 60, 100	--	--
290290.316D.XX	SMA Female S/T	SMA Female S/T	30, 40, 50, 60, 100	6.0	1.50
500510.316D.XX	SMB Female S/T	SMB Male S/T	30, 40, 50, 60, 100	3.0	--
510510.316D.XX	SMB Male S/T	SMB Male S/T	30, 40, 50, 60, 100	4.0	--



***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: ± 0.5 cm , Length \leq 30cm: ± 1.0 cm , Length \leq 50cm: ± 2.0 cm ,
Length \leq 100cm: ± 2.5 cm, Length $>$ 101cm: ± 3.0 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 : 0.12×2 (sides)

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

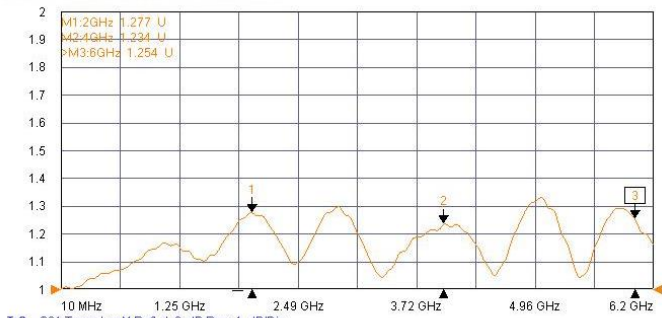
NOTES:

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

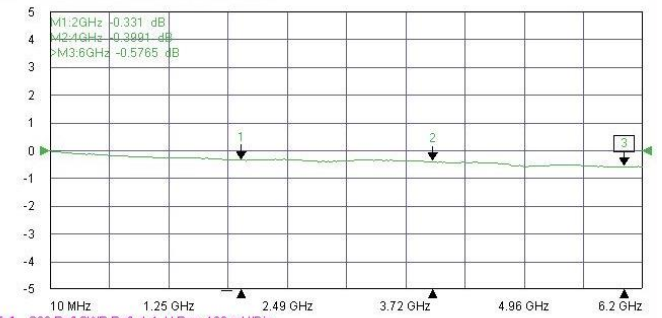
Typical Test Result

PART NUMBER	DESCRIPTION
222240.316D.11A	MCX Male R/A To MMCX Male, RG316D/L:11cm/Brass Tubing

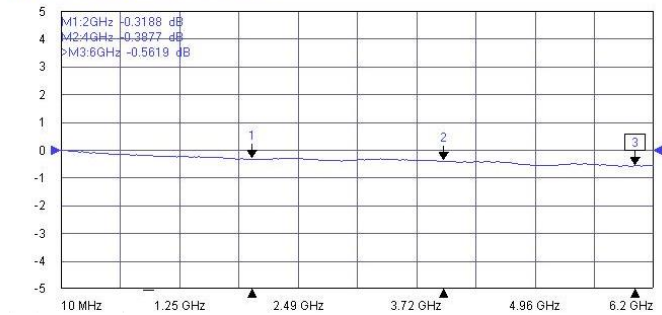
Tr1 S11 Ref SWR RefLvl: 1 U Res: 100 mU/Div



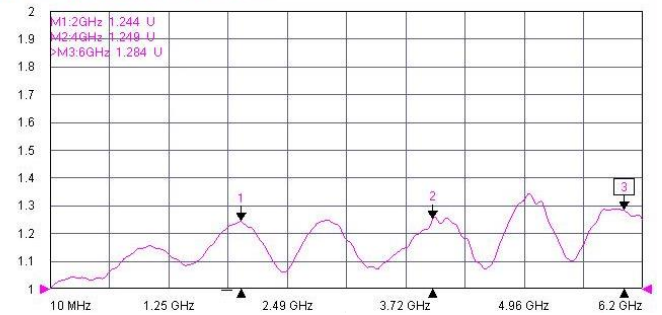
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



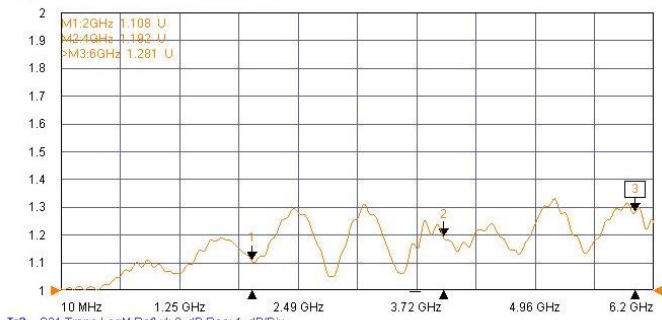
Tr4 S22 Ref SWR RefLvl: 1 U Res: 100 mU/Div



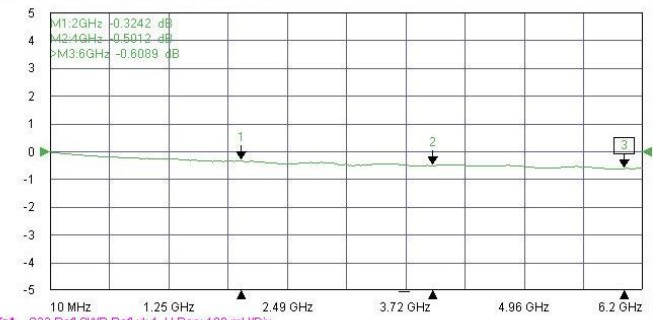
Typical Test Result

PART NUMBER	DESCRIPTION
222242.316D.13A	MCX Male R/A To MMCX Male R/A, RG316D/L:13cm/Brass Tubing

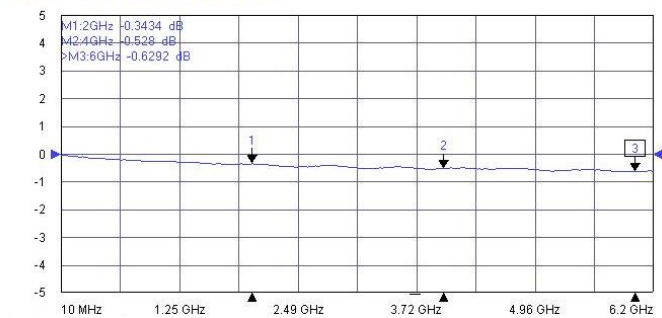
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



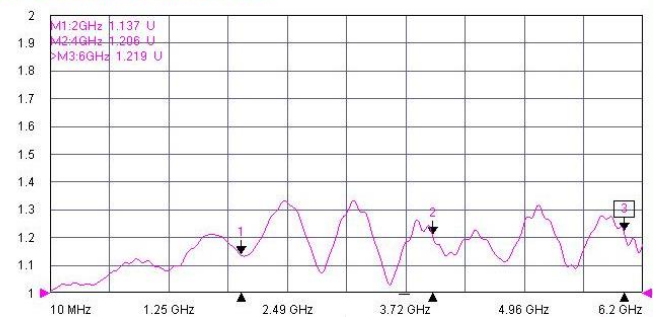
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



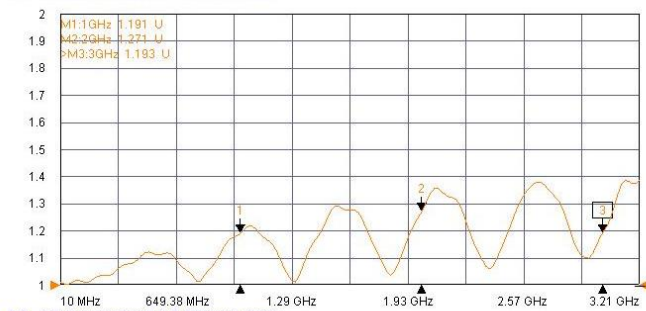
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



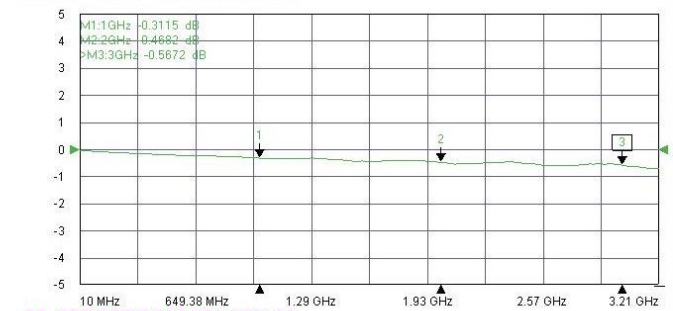
Typical Test Result

PART NUMBER	DESCRIPTION
240282.316D.20A	MMCX Male To SMA Male R/A, RG316D/L:20cm/Brass Tubing

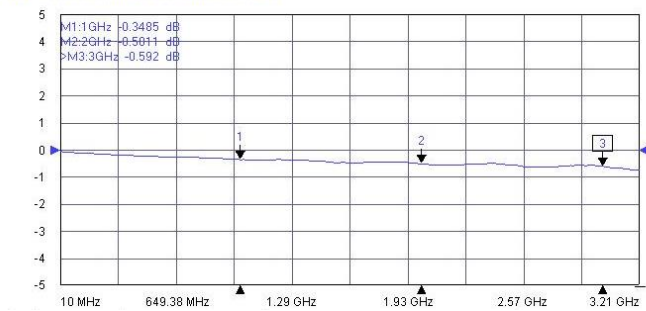
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



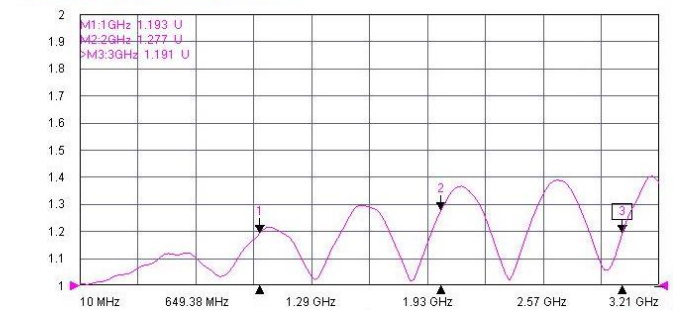
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



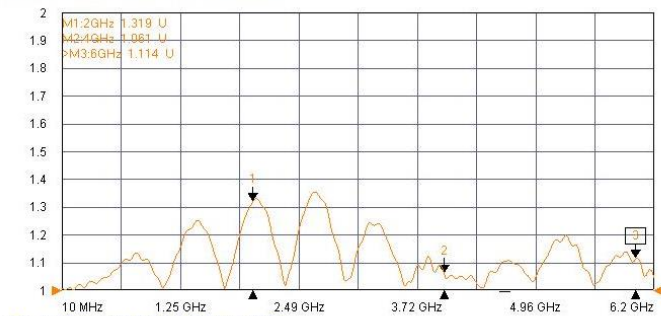
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



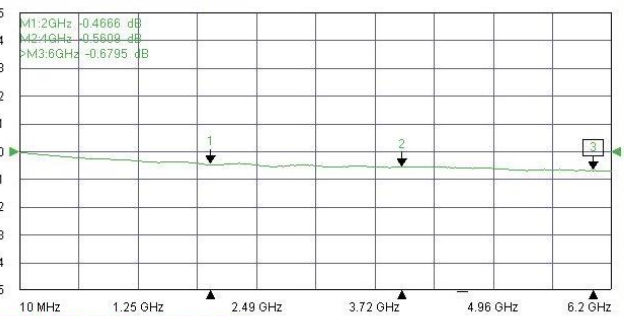
Typical Test Result

PART NUMBER	DESCRIPTION
242242.316D.15A	MMCX Male R/A To MMCX Male R/A, RG316D/L:15cm/Brass Tubing

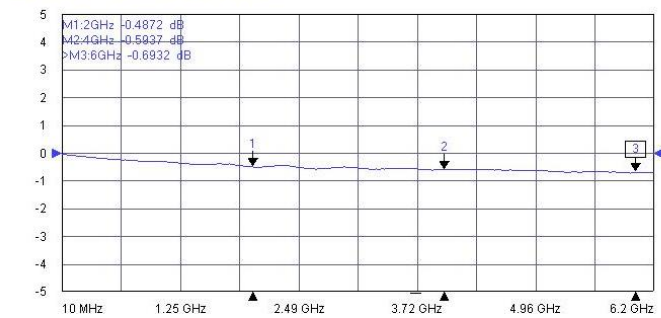
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



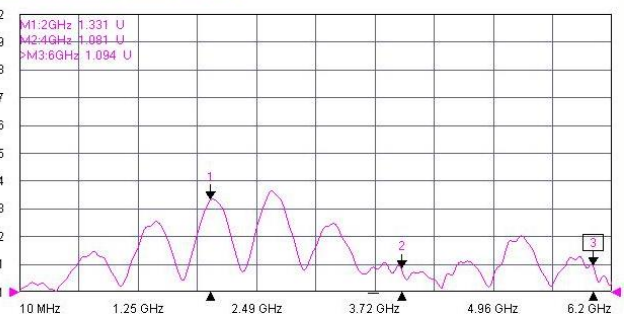
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



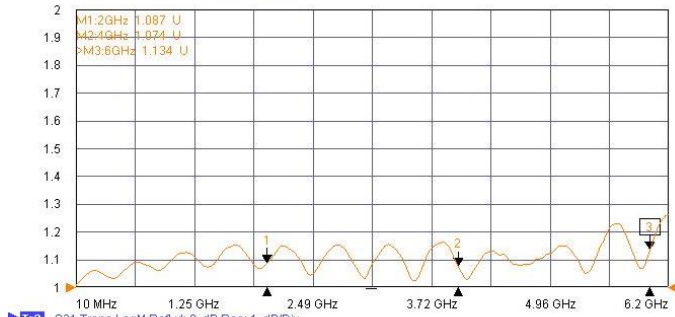
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



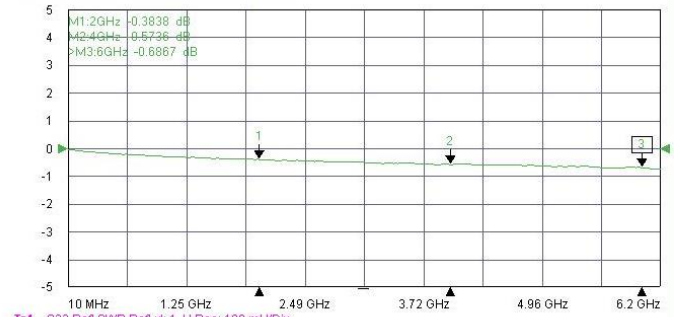
Typical Test Result

PART NUMBER	DESCRIPTION
242280.316D.20A	MMCX Male R/A To SMA Male, RG316D/L:20cm

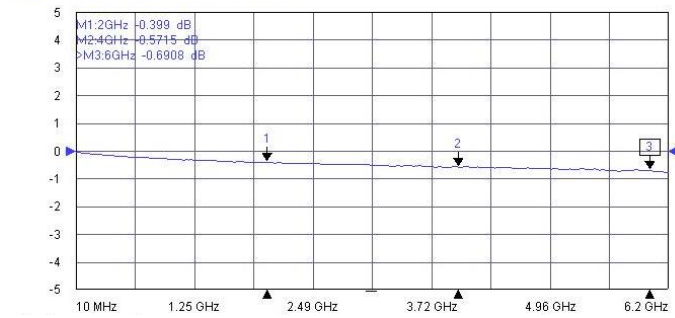
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



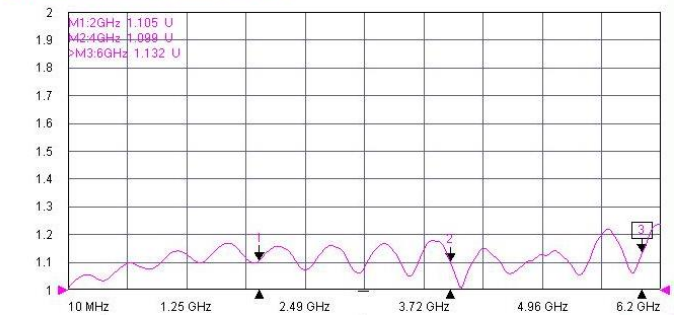
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



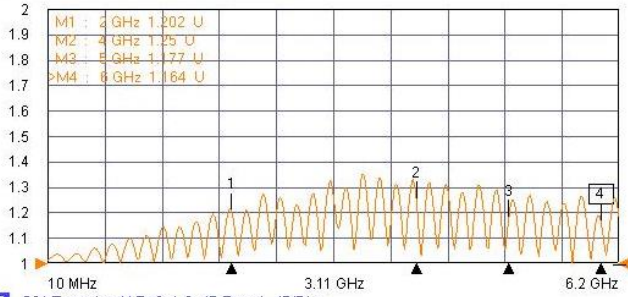
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



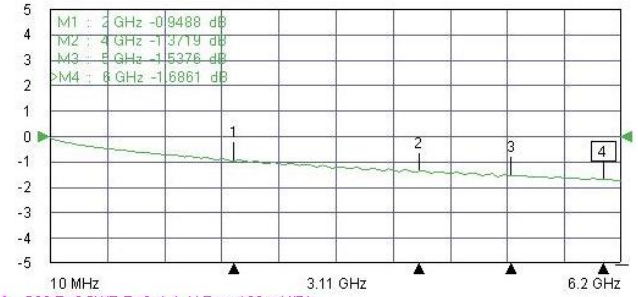
Typical Test Result

PART NUMBER	DESCRIPTION
242290.316D.60A	MMCX Male R/A To SMA Female, RG316D/L:60cm/Brass Tubing

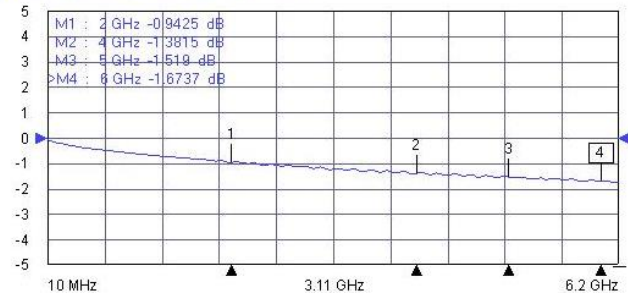
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



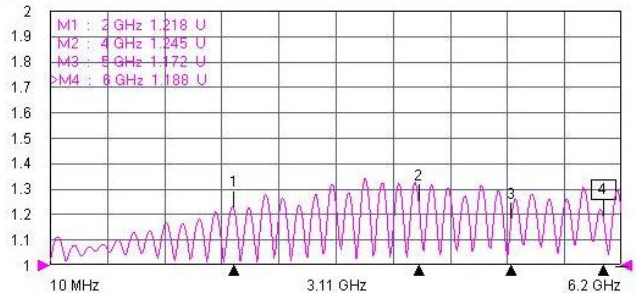
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



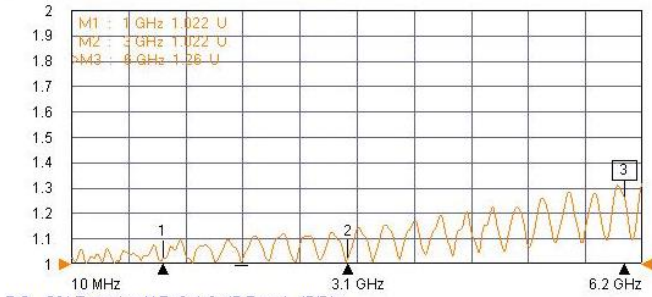
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



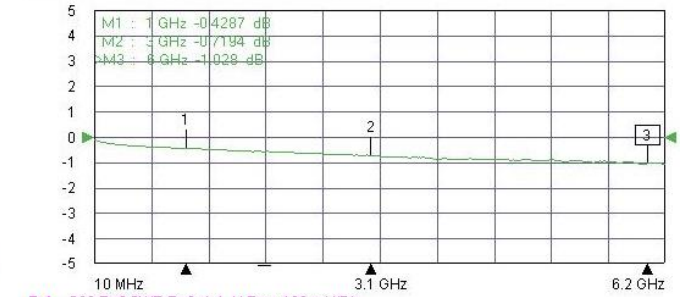
Typical Test Result

PART NUMBER	DESCRIPTION
280280.316D.40A	SMA Male To SMA Male, RG316D/L:40cm/Brass Tubing

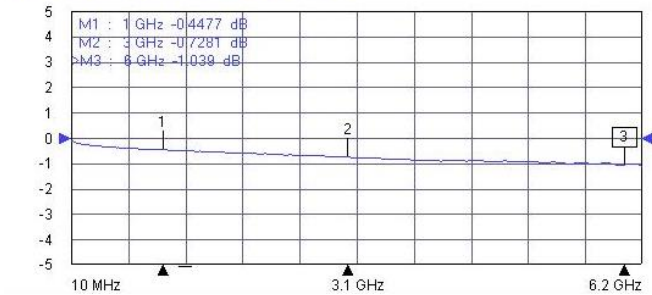
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



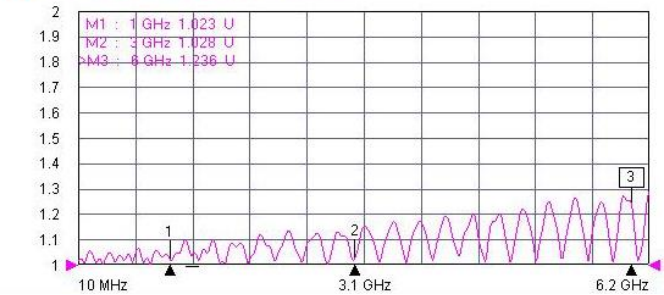
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



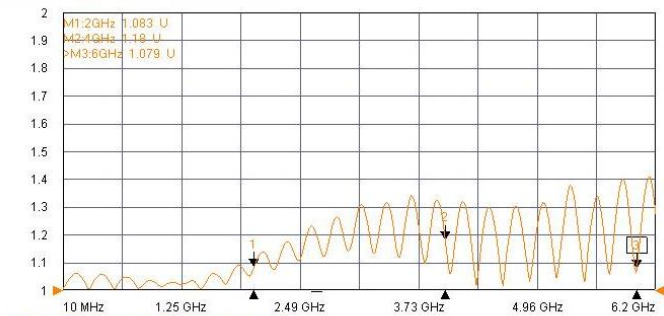
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



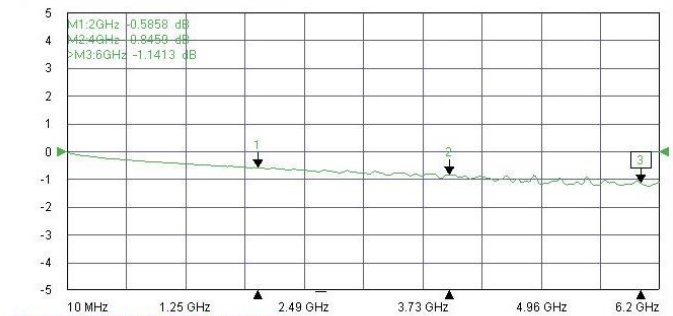
Typical Test Result

PART NUMBER	DESCRIPTION
280281.316D.40A	SMA Male Reverse To SMA Male, RG316D L:/40cm/Brass Tubing

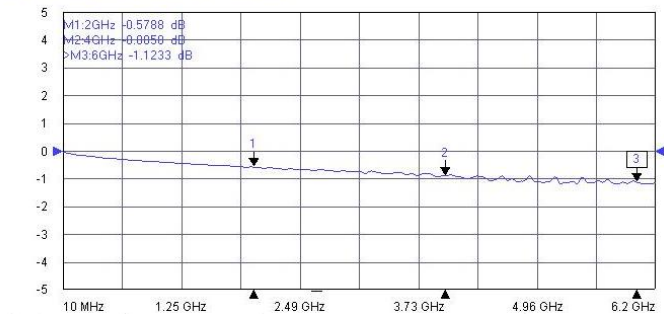
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



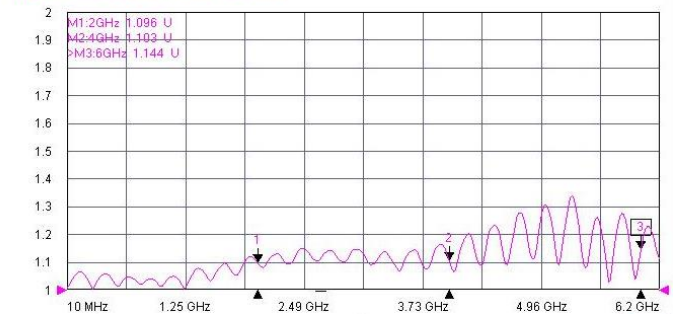
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



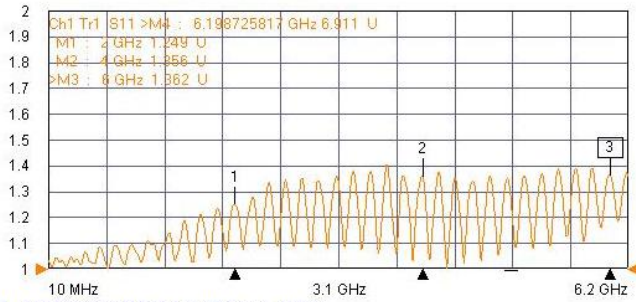
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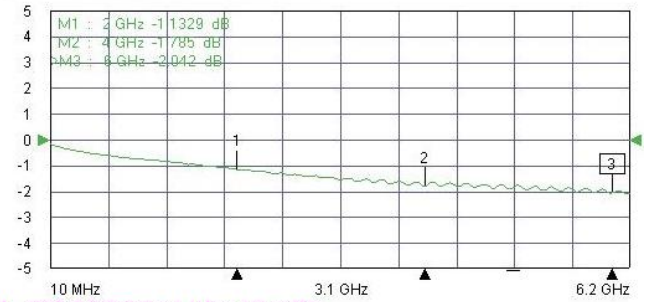
Typical Test Result

PART NUMBER	DESCRIPTION
280500.316D.60A	SMA Male To SMB Female ,RG316D/L:60cm/Brass Tubing

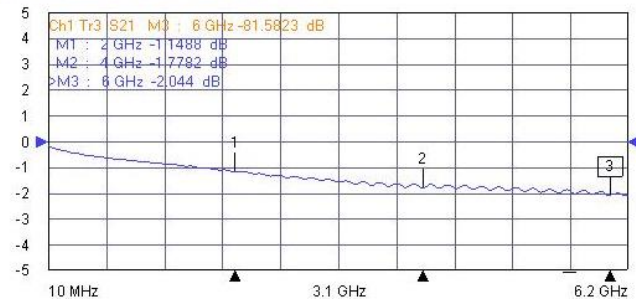
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



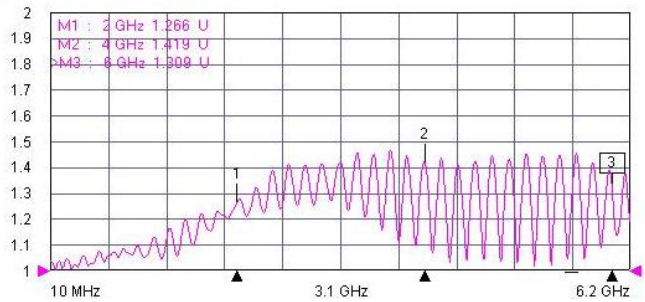
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



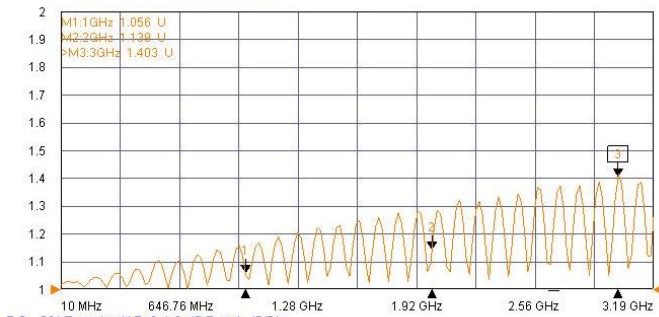
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



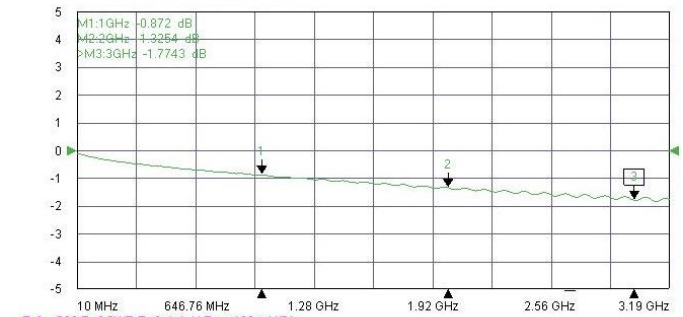
Typical Test Result

PART NUMBER	DESCRIPTION
282282.316D.100A	SMA Male R/A To SMA Male R/A, RG316D/L:100cm/Brass Tubing

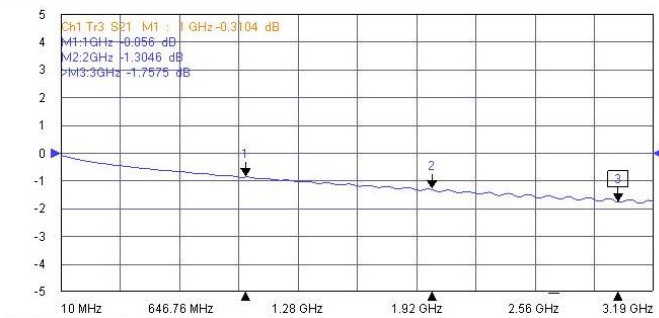
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



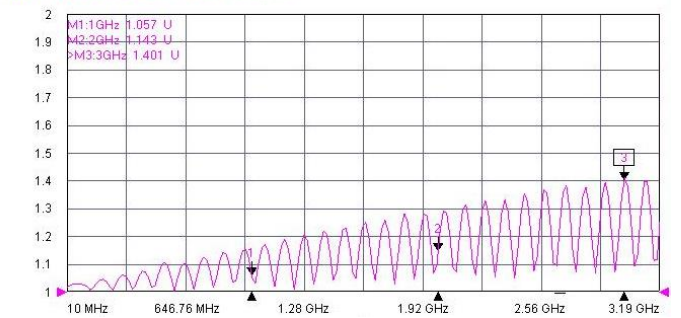
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



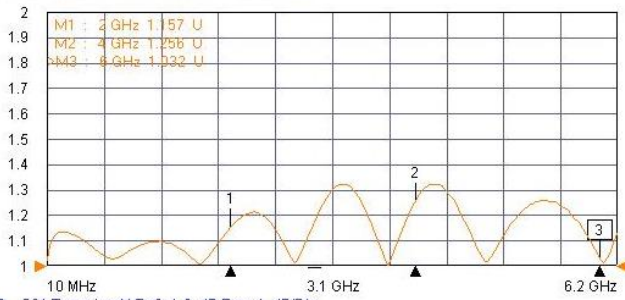
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



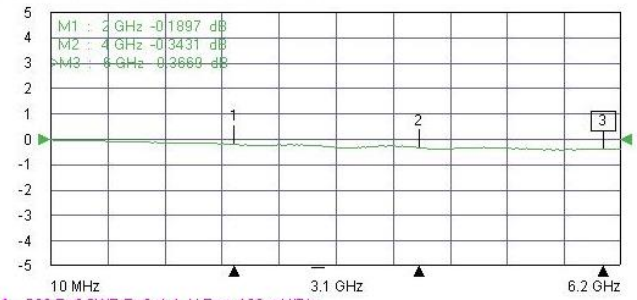
Typical Test Result

PART NUMBER	DESCRIPTION
290290.316D.10A	SMA Female To SMA Female, RG316D/L:10cm/Brass Tubing

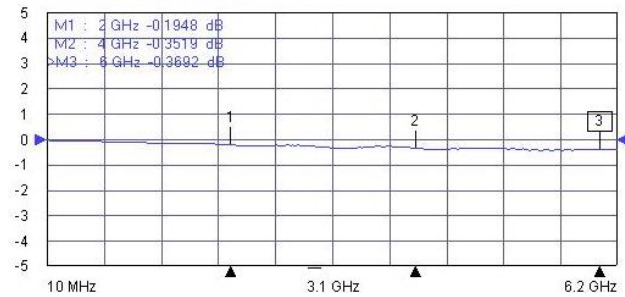
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



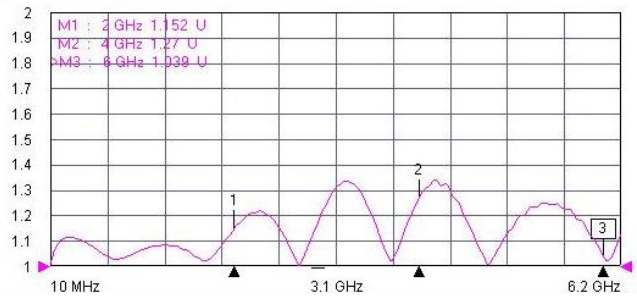
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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
510510.316D.25A	SMB Male To SMB Male, RG316D/L:25cm/Brass Tubing

