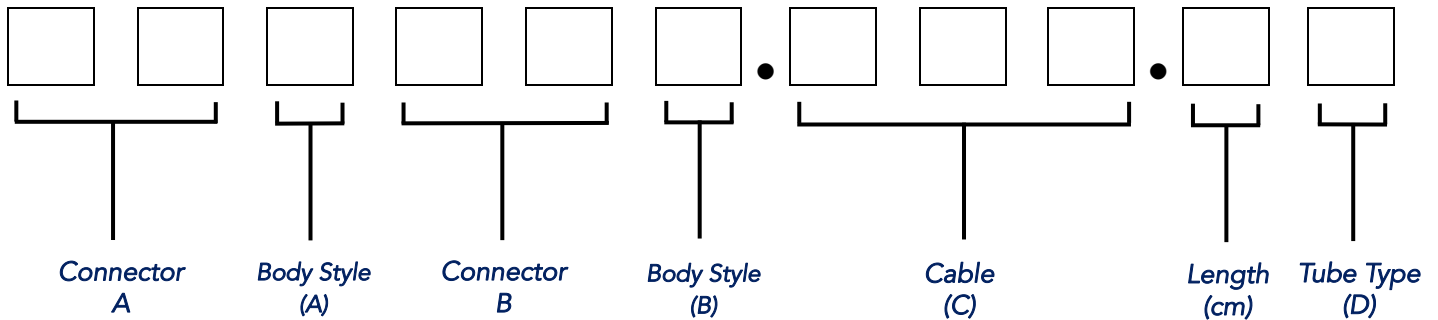


## STANDARD COAXIAL CABLE ASSEMBLIES

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-SPF141.50

#### Features

- ✓ Frequency up to 18GHz
- ✓ Replace to SFL402 Cables
- ✓ Excellent shielding effect greater than 100dB
- ✓ Fully flexible for ease of installation

## SPIRAL-FLEX 402 (SFL402)



#### Specifications

##### CONSTRUCTION

ITEM	MATERIAL	DIAMETER
CENTER CONDUCTOR	Stranded Silver Plated Copper	0.98±0.03mm
INSULATION	Solid PTFE	2.97±0.13mm
INNER SHIELD	Silver Plated Copper Tape	3.18±0.13mm
OUTER SHIELD	Round Silver Plated Copper	3.50±0.13mm
JACKET	Blue Polyurethane	4.70±0.2mm

##### ELECTRICAL DATA

ITEM	SPECIFICATION
CUT-OFF FREQUENCY	18GHz
IMPEDANCE	50±20hms
CAPACITANCE	95 pF/m
BENDIGN RADIU	20mm
TEST VOLTAGE	5,000Vrms @1MIN.
CONTINUOUS WORKING VOLTAGE	1900Vrms MAX.
VELOCITY OF PROPAGATION	69.5 %
WEIGHT	42.5Kg/Km
TEMPERTURE	-40°C ~ +80°C

##### MAXIMUM ATTENUATION

FREQUENCY	ATTENUATION dB/M
1000 MHz	0.50
3000MHz	0.98
5000MHz	1.37
10000MHz	1.85
18000MHz	2.29



#### 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.)
260260.SPF141.XX	N Male S/T	N Male S/T	60, 100, 120,150, 200	6.0	1.35
260260.SPF141.XX(H3)	N Male S/T	N Male S/T	60, 100, 120,150, 200	10.0	1.40
260276.SPF141.XX	N Male S/T	N Female B.H	60, 100, 120,150, 200	6.0	1.35
260280.SPF141.XX	N Male S/T	SMA Male S/T	60, 100, 120,150, 200	6.0	1.30
260280.SPF141.XX(H)	N Male S/T	SMA Male S/T	60, 100, 120,150, 200	10.0	1.50
280280.SPF141.XX	SMA Male S/T	SMA Male S/T	60, 100, 120,150, 200	10.0	1.30
280280.SPF141.XX(H)	SMA Male S/T	SMA Male S/T	60, 100, 120,150, 200	18.0	1.35
280280.SPF141.XX(H3)	SMA Male S/T	SMA Male S/T	60, 100, 120,150, 200	18.0	1.40
280281.SPF141.XX	SMA Male S/T	SMA Male (RP) S/T	60, 100, 120,150, 200	10.0	1.30
280281.SPF141.XX(H3)	SMA Male S/T	SMA Male (RP) S/T	60, 100, 120,150, 200	18.0	1.40
280282.SPF141.XX	SMA Male S/T	SMA Male R/A	60, 100, 120,150, 200	6.0	1.30
280290.SPF141.XX	SMA Male S/T	SMA Female S/T	60, 100, 120,150, 200	10.0	1.30
280290.SPF141.XX(H3)	SMA Male S/T	SMA Female S/T	60, 100, 120,150, 200	18.0	1.40
290290.SPF141.XX	SMA Female S/T	SMA Female S/T	60, 100, 120,150, 200	10.0	1.30
290290.SPF141.XX(H3)	SMA Female S/T	SMA Female S/T	60, 100, 120,150, 200	18.0	1.40

### \*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 :  $0.12 \times 2(\text{sides})$

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

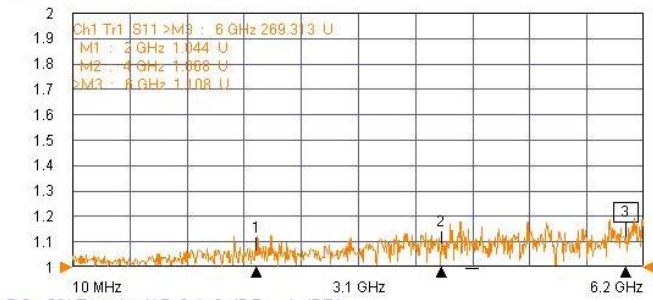
### NOTES:

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

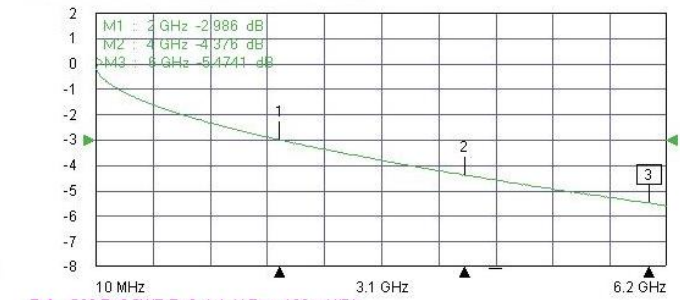
## Typical Test Result

PART NUMBER	DESCRIPTION
260260.SPF141.500C	N Male To N Male, SPF141/L:500cm/Brass Tubing

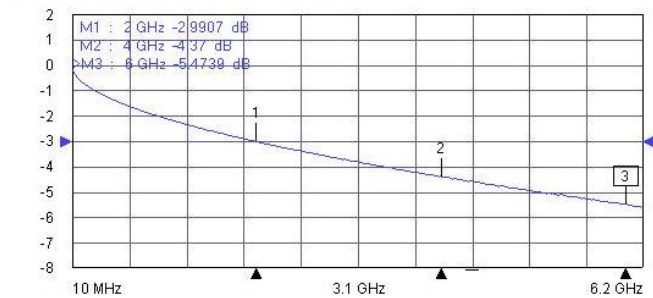
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



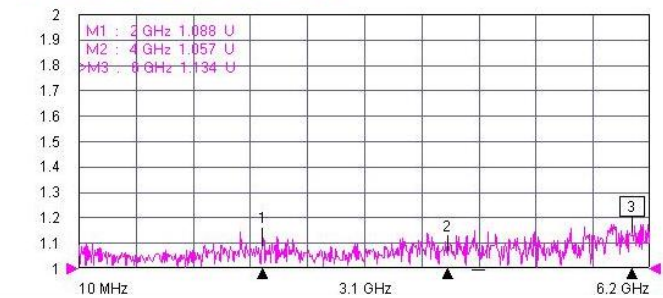
Tr2 S12 Trans LogM RefLvl: -3 dB Res: 1 dB/Div



Tr3 S21 Trans LogM RefLvl: -3 dB Res: 1 dB/Div



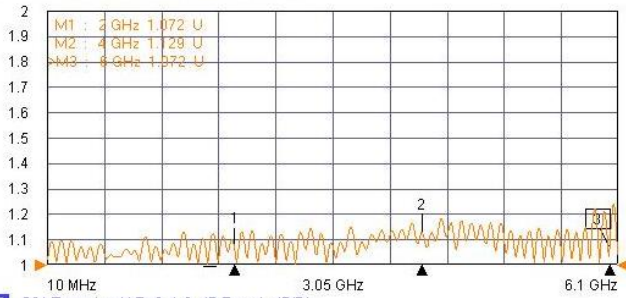
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



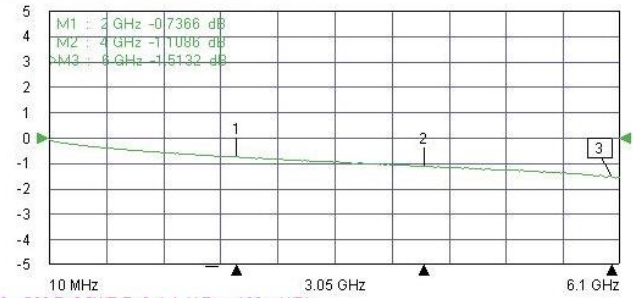
## Typical Test Result

PART NUMBER	DESCRIPTION
260276.SPF141.100A	N Male To N Female B.H, SPF141/L:100cm/Brass Tubing

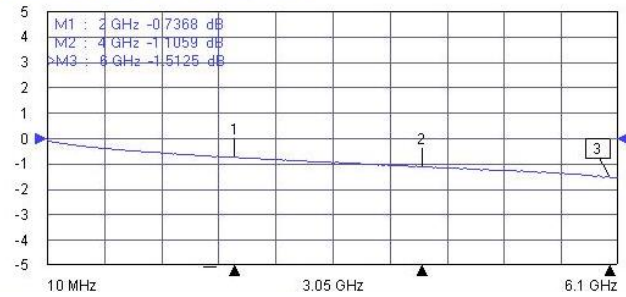
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



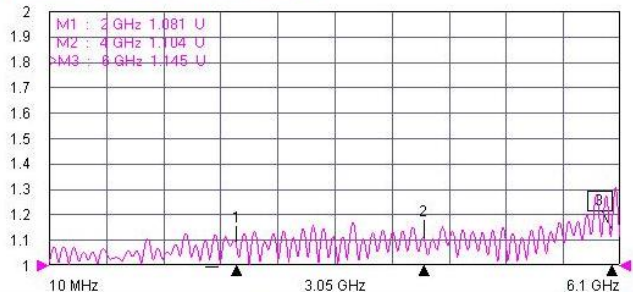
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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

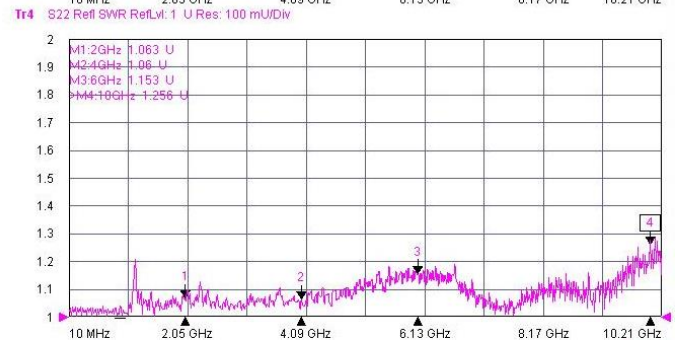
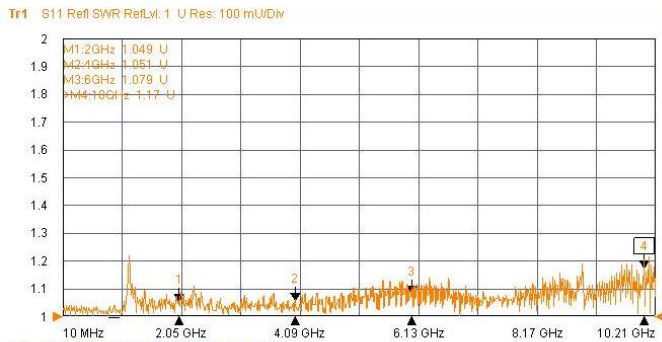


Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



## Typical Test Result

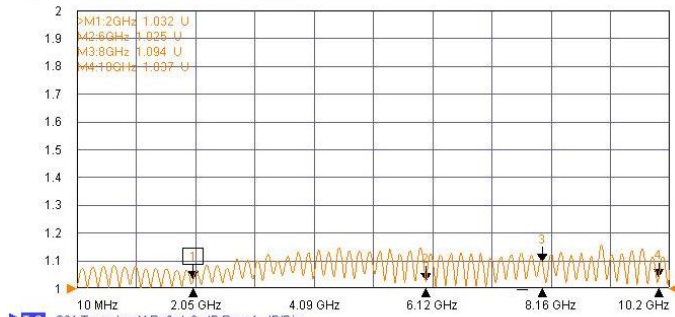
PART NUMBER	DESCRIPTION
260280.SPF141.250A(H)	N Male To SMA Male/Stainless, SPF141/L:250cm/Brass Tubing/DC-10GHz



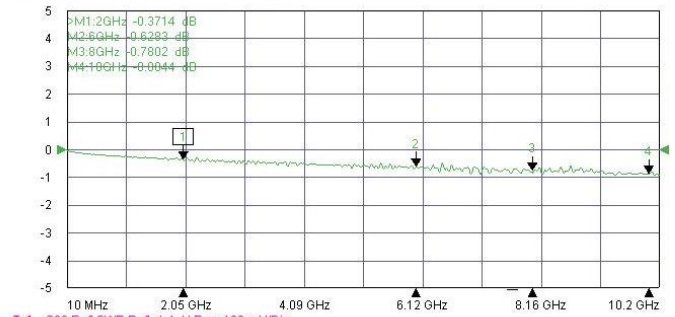
## Typical Test Result

PART NUMBER	DESCRIPTION
280280.SPF141.60A	SMA Male To SMA Male, SPF141/L:60cm/Brass Tubing

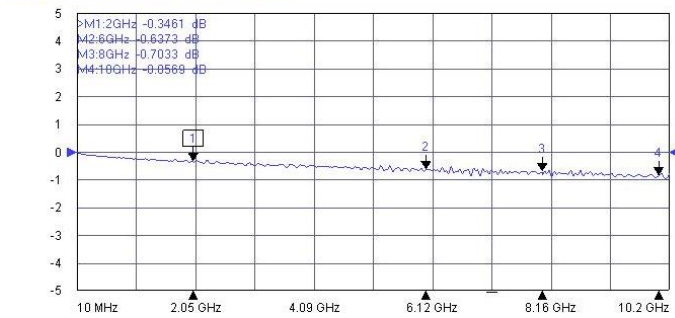
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



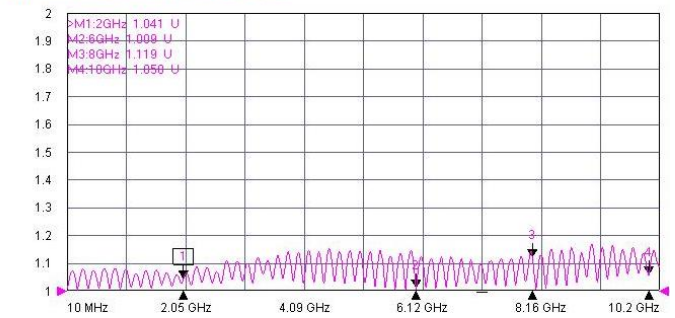
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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

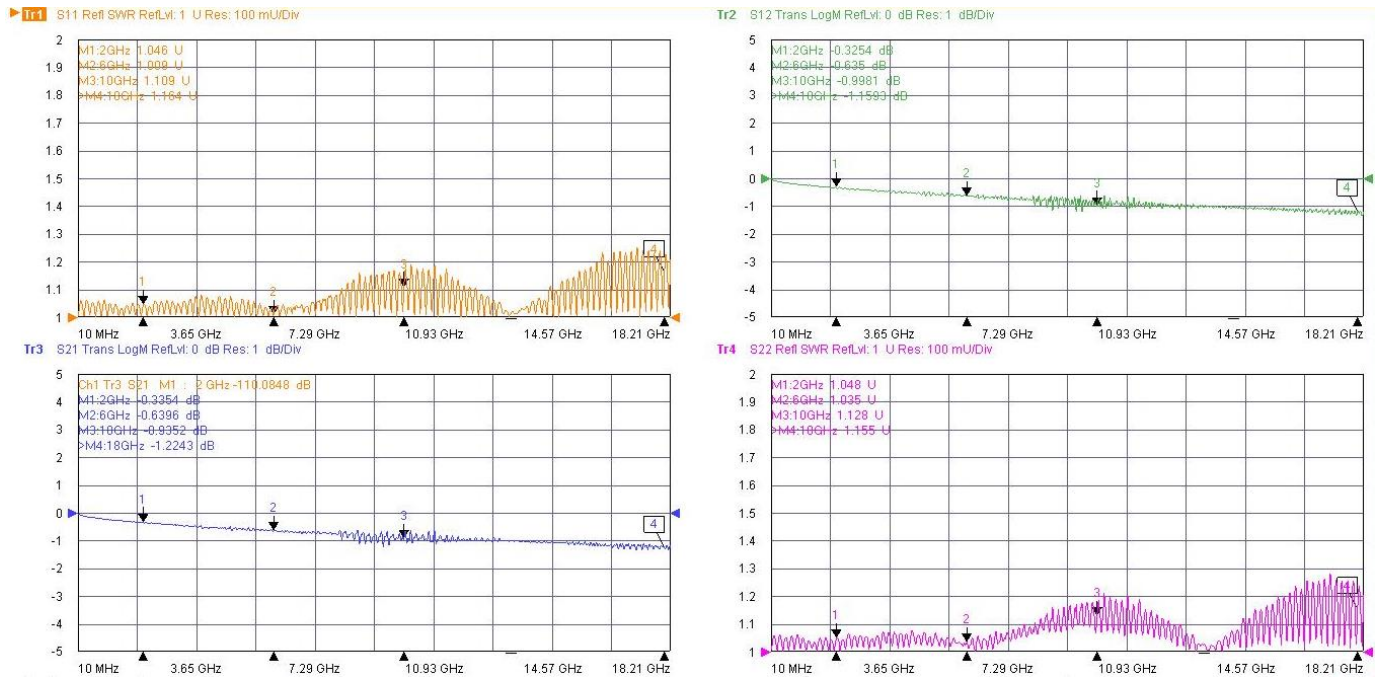


Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



## Typical Test Result

PART NUMBER	DESCRIPTION
280280.SPF141.60A(H3)	SMA Male/Stainless To SMA Male/Stainless, SPF141/L:60cm,DC-18GHz

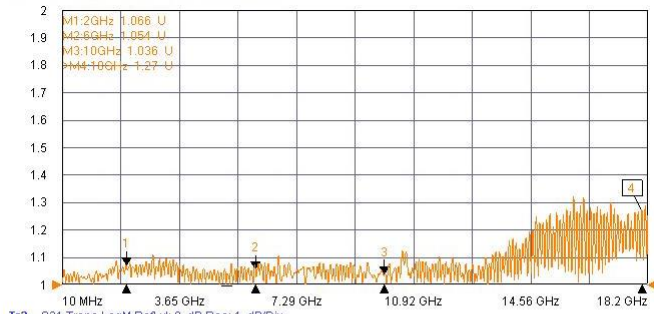




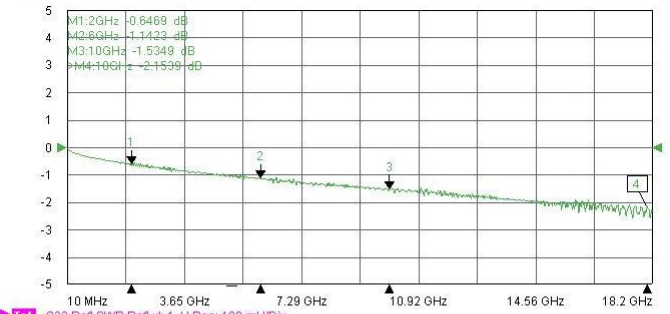
## Typical Test Result

PART NUMBER	DESCRIPTION
280281.SPF141.100B(H3)	SMA Male/Stainless To SMA Male Reverse/Stainless , SPF141 Blue/L:100cm/Double Rigid Tubing, DC-18GHz

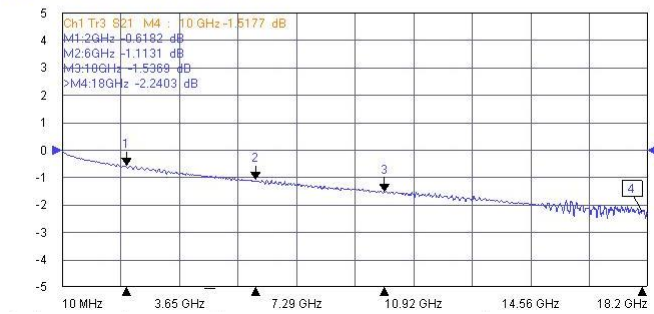
Tr1 S11 Ref SWR RefLvl: 1 U Res: 100 mU/Div



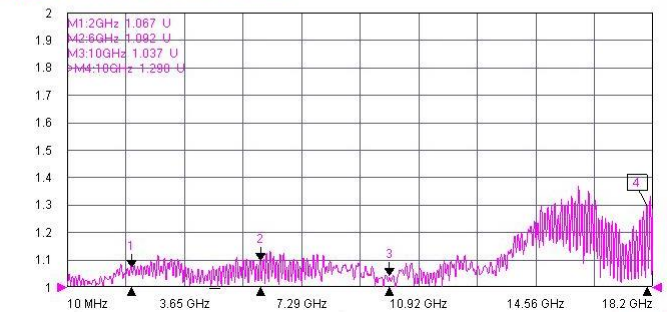
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



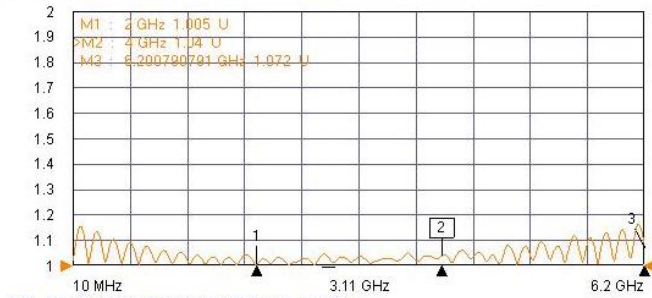
Tr4 S22 Ref SWR RefLvl: 1 U Res: 100 mU/Div



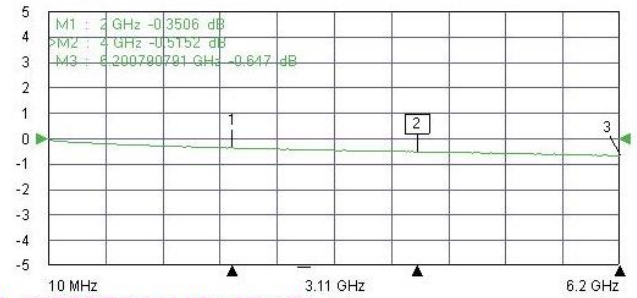
## Typical Test Result

PART NUMBER	DESCRIPTION
280282.SPF141.60A	SMA Male To SMA Male R/A, SPF141/L:60cm

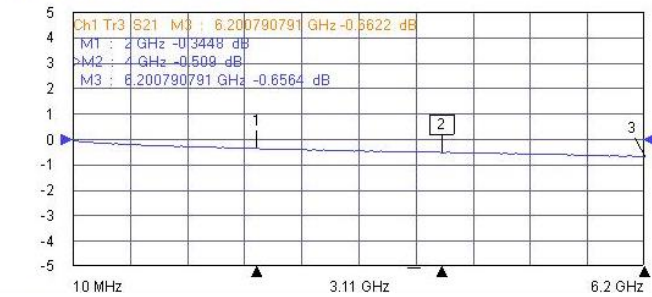
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



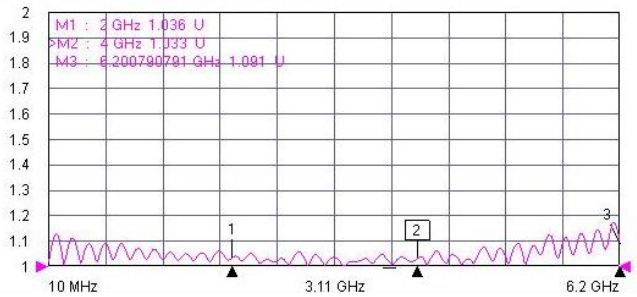
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



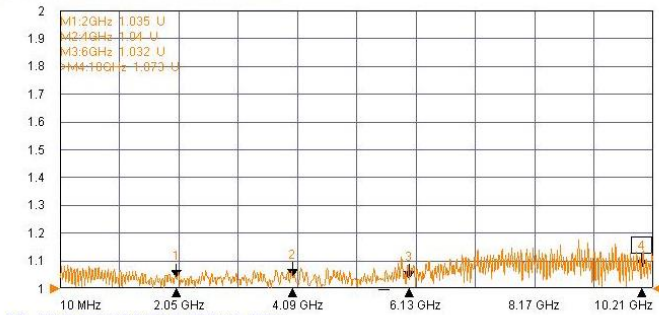
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



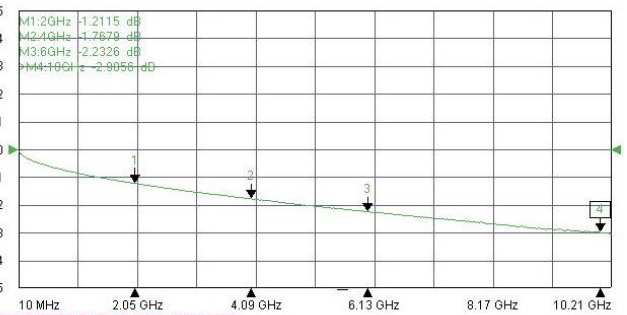
## Typical Test Result

PART NUMBER	DESCRIPTION
280290.SPF141.200B	SMA Male To SMA Female, SPF141/L:200cm/Double Rigid Tubing

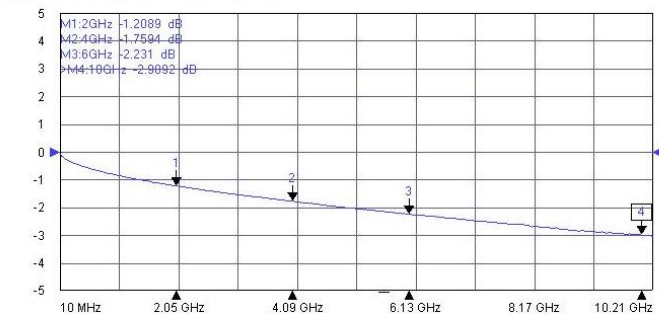
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



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

