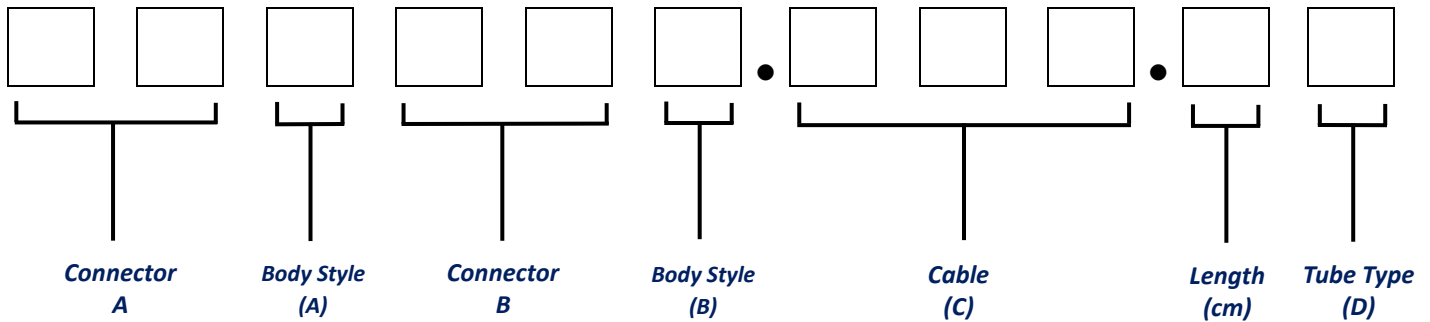


STANDARD COAXIAL CABLE ASSEMBLIES

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 |
|-----------------|----------------|-------------------|--------------------------|--------------------|------|
| 200200.316D.XX | BNC Male S/T | BNC Male S/T | 30, 40, 50, 60, 80 | 3.0 | -- |
| 200280.316D.XX | BNC Male S/T | SMA Male S/T | 30, 40, 50, 60, 80 | 3.0 | -- |
| 200510.316D.XX | BNC Male S/T | SMB Male S/T | 30, 40, 50, 60, 80 | 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, 80 | 3.0 | -- |
| 222240.316D.XX | MCX Male R/A | MMCX Male S/T | 30, 40, 50, 60, 80 | 6.0 | 1.50 |
| 222242.316D.XX | MCX Male R/A | MMCX Male R/A | 30, 40, 50, 60, 80 | 6.0 | 1.50 |
| 240282.316D.XX | MMCX Male S/T | SMA Male R/A | 30, 40, 50, 60, 80 | 3.0 | 1.50 |
| 242242.316D.XX | MMCX Male R/A | MMCX Male R/A | 30, 40, 50, 60, 80 | 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 |
| 280280.316D.XX | SMA Male S/T | SMA Male S/T | 30, 40, 50, 60, 100, 250 | 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, 80 | 6.0 | 1.50 |
| 280510.316D.XX | SMA Male S/T | SMB Male S/T | 30, 40, 50, 60, 80 | 3.0 | -- |
| 280512.316D.XX | SMA Male S/T | SMB Male R/A | 30, 40, 50, 60, 80 | 3.0 | -- |
| 282282.316D.XX | SMA Male R/A | SMA Male R/A | 30, 40, 50, 60, 100 | 3.0 | 1.50 |
| 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, 80 | 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 $\leq 30\text{CM}$, 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 : 0.12×2 (sides)

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

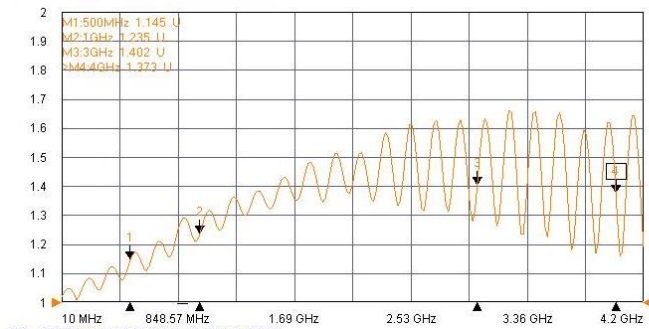
NOTES:

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

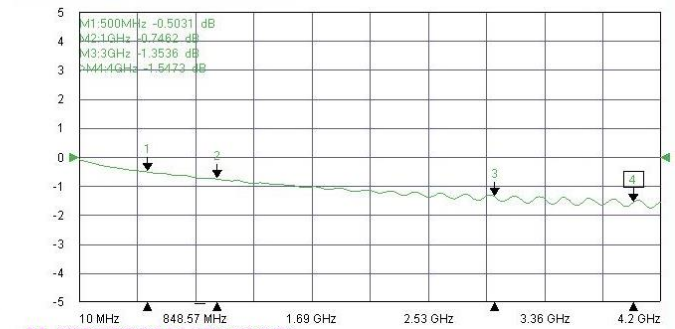
Typical Test Result

| PART NUMBER | DESCRIPTION |
|-----------------|---|
| 200510.316D.60A | BNC Male To SMB Male, RG316D/L:60cm /Brass Tubing |

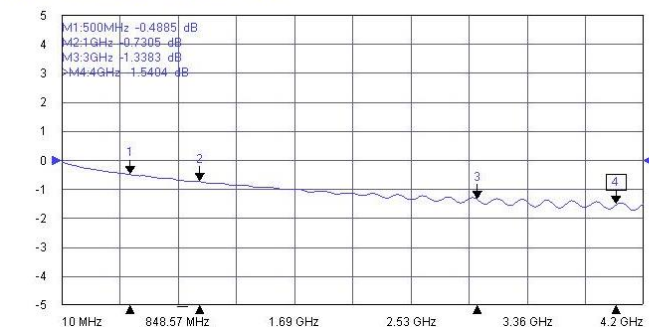
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



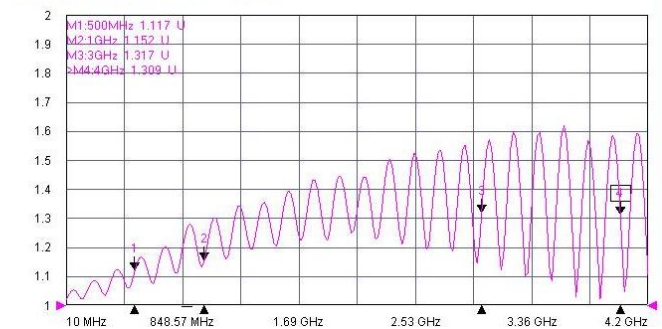
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



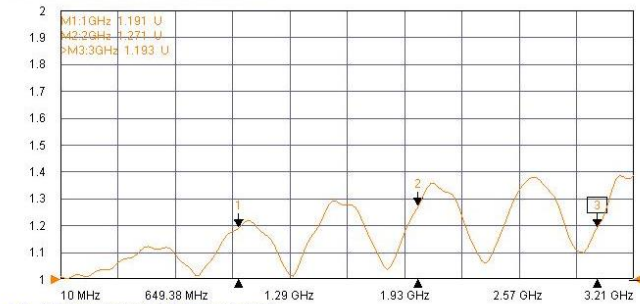
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



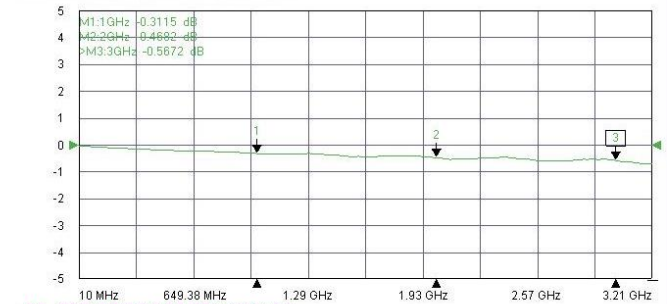
Typical Test Result

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

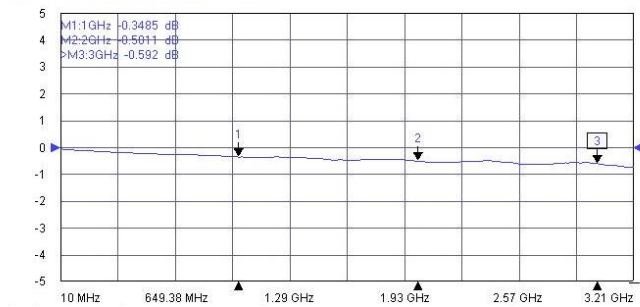
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



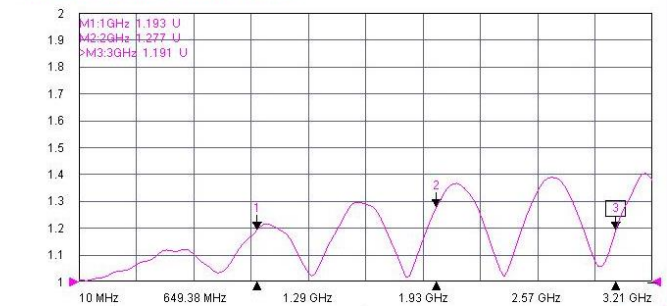
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



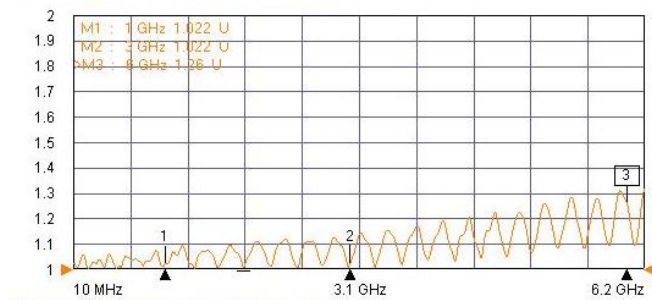
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



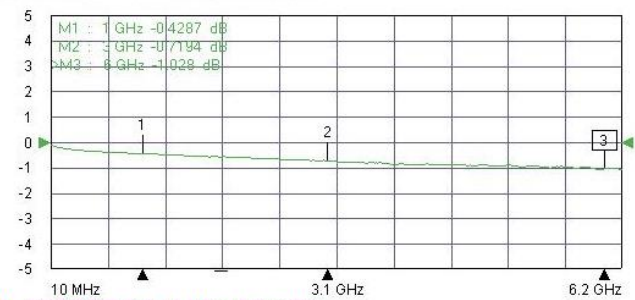
Typical Test Result

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

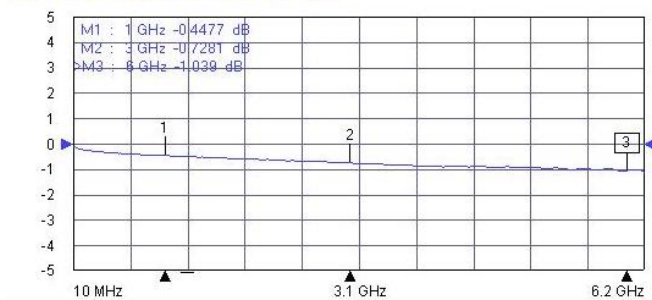
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



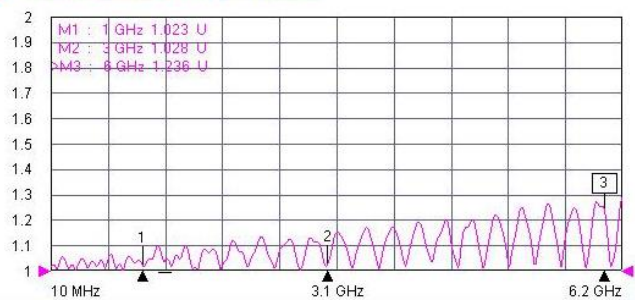
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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

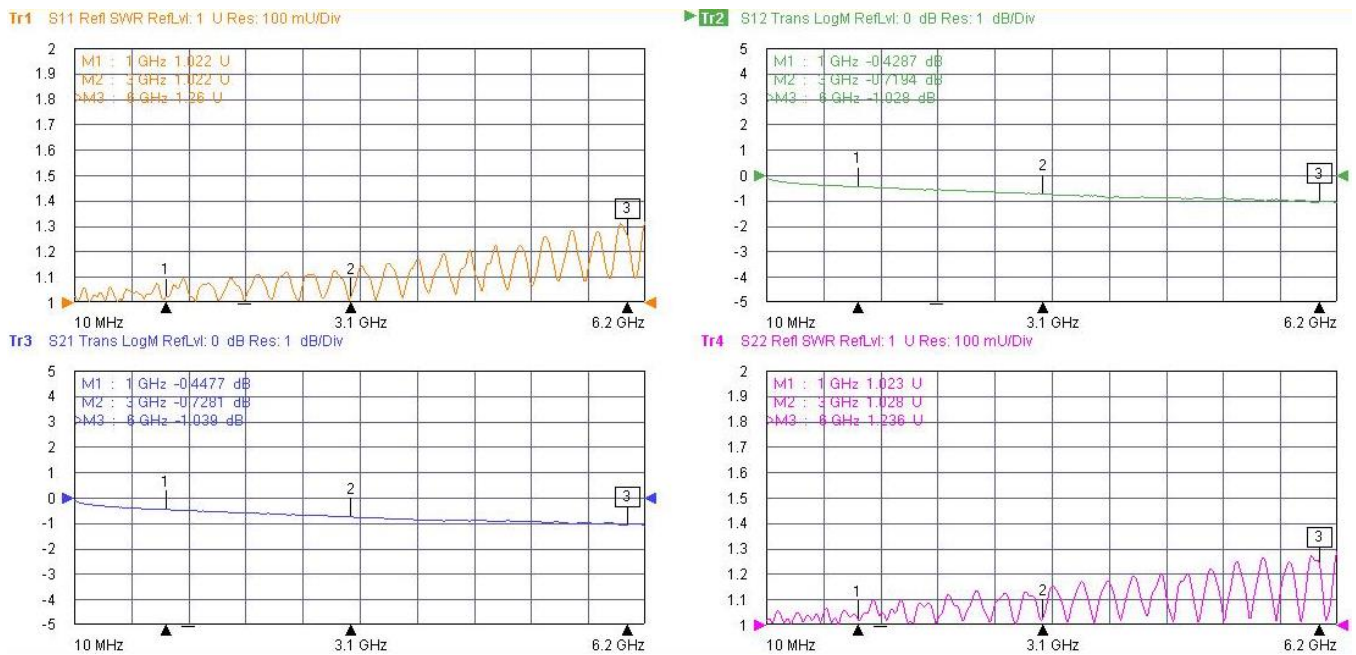


Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



Typical Test Result

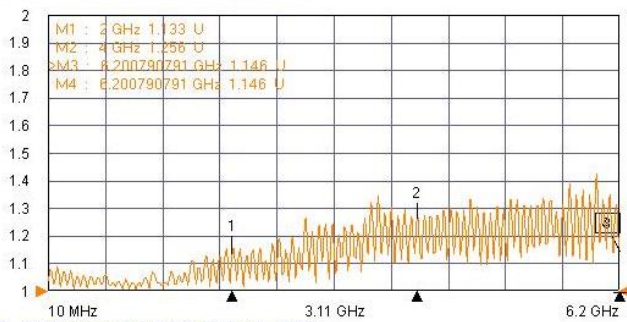
| PART NUMBER | DESCRIPTION |
|-----------------|---|
| 242290.316D.60A | MMCX Male R/A To SMA Female, RG316D/L:60cm/Brass Tubing |



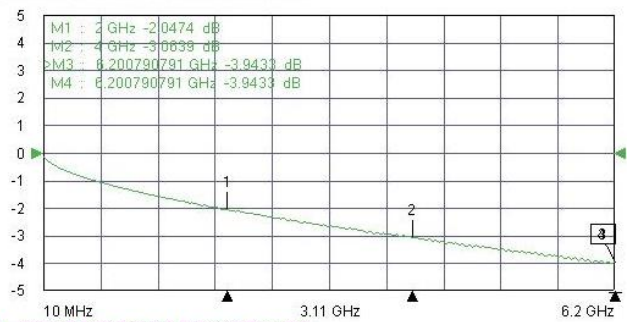
Typical Test Result

| PART NUMBER | DESCRIPTION |
|------------------|---|
| 220280.316D.150A | MCX Male To SMA Male, RG316D/L:150cm/Brass Tubing |

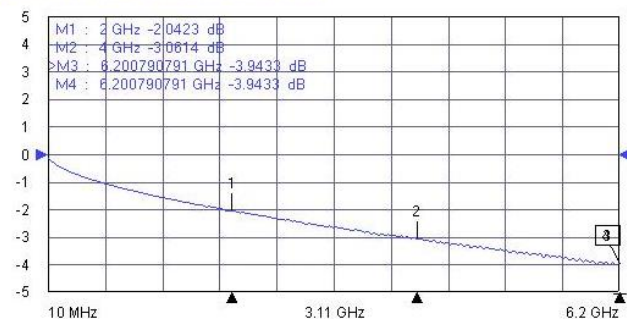
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



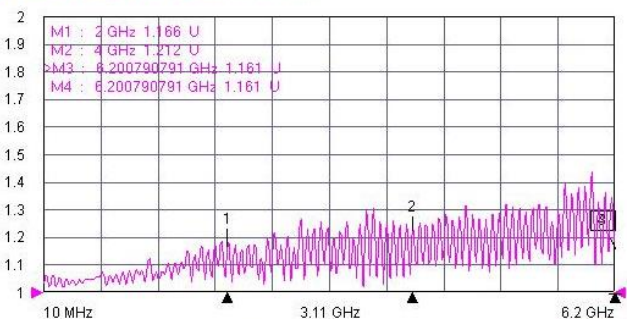
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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



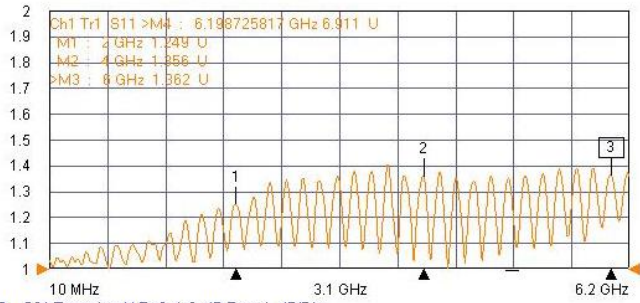
Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



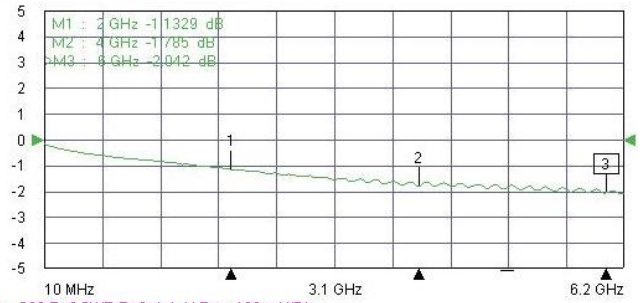
Typical Test Result

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

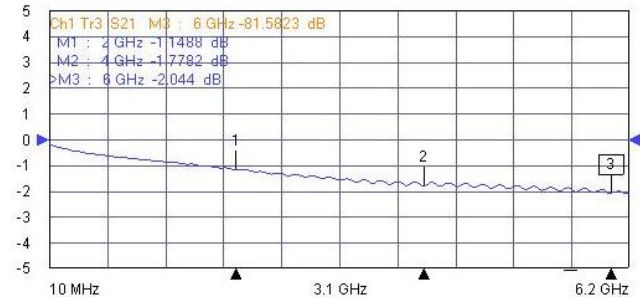
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



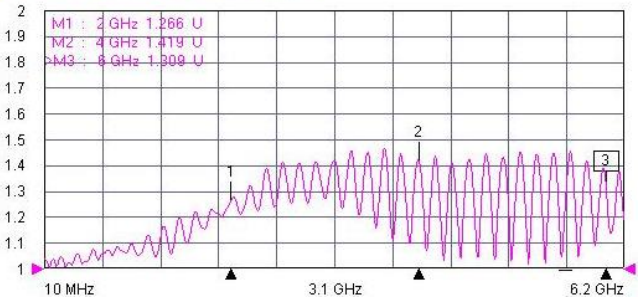
Tr2 S12 Trans LogM RefLvl: 0 dB Res: 1 dB/Div



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

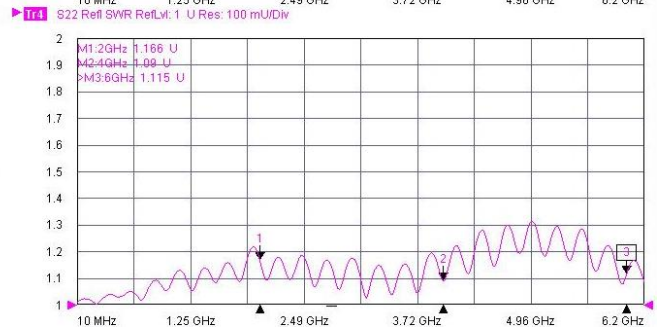
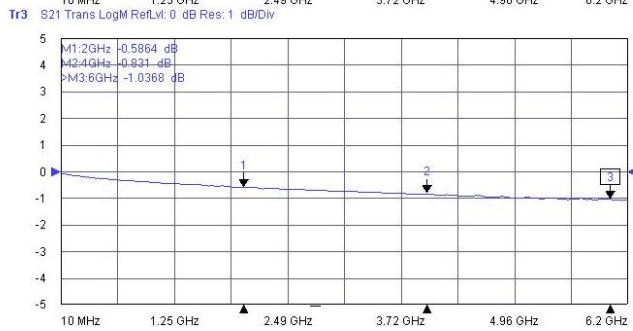
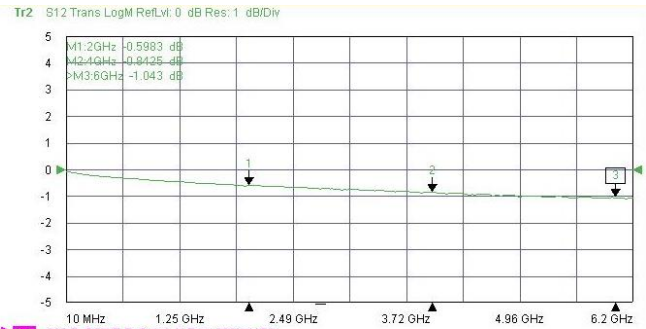
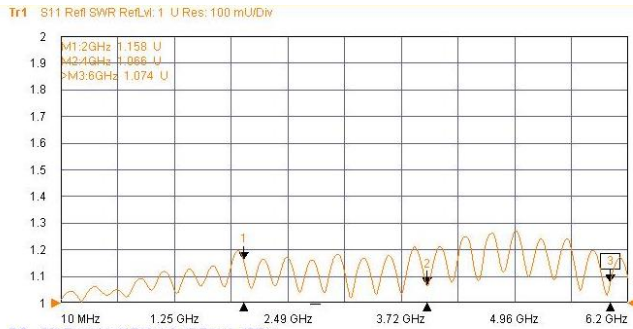


Tr4 S22 Refl SWR RefLvl: 1 U Res: 100 mU/Div



Typical Test Result

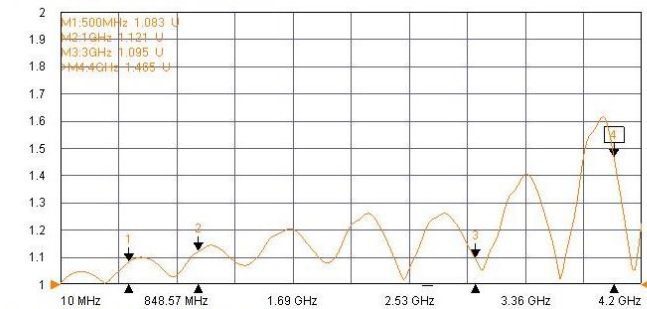
| PART NUMBER | DESCRIPTION |
|-----------------|---|
| 280281.316D.40A | SMA Male To SMA Male Reverse, RG316D L:/40cm/Brass Tubing |



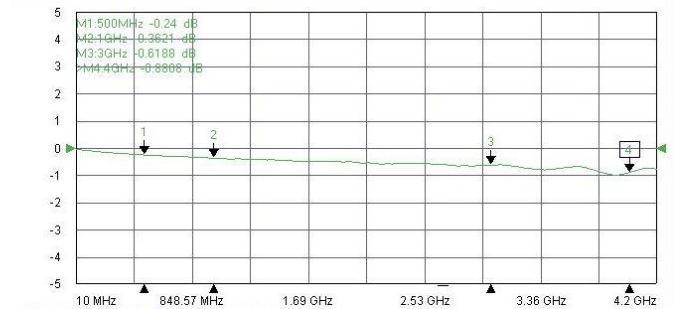
Typical Test Result

| PART NUMBER | DESCRIPTION |
|-----------------|--|
| 510510.316D.20A | SMB Male To SMB Male, RG316D/L:20cm/Brass Tubing |

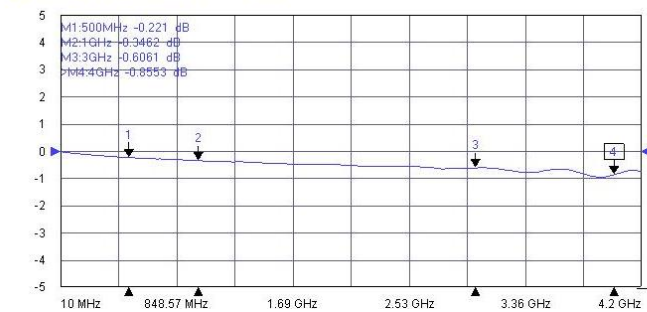
Tr1 S11 Refl SWR RefLvl: 1 U Res: 100 mU/Div



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

