



00100A1F5A1XXX

## Cable Assembly

### 18GHz Stainless SMA(M)–SMA(M) for SS402 Cable Assembly

#### Features

- ✓ High Repeatability
- ✓ Low VSWR



#### Test Report

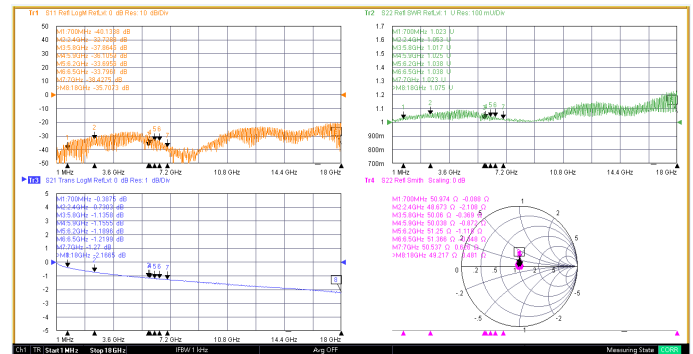
100cm:

#### Electrical Specifications

|              |             |
|--------------|-------------|
| Frequency    | DC-18GHz    |
| VSWR         | 1.3:1(Max.) |
| Impedance    | 50Ohm       |
| Connection 1 | SMA Male    |
| Connection 2 | SMA Male    |

#### Material

| Part                  | Material        | Plated |
|-----------------------|-----------------|--------|
| 1.SMA Connector       |                 |        |
| Body                  | Stainless Steel |        |
| Center Pin            | Brass           | Gold   |
| Insulator             | Teflon          |        |
| 2.Cable               |                 |        |
| SS402 Coaxial Cable   |                 | Blue   |
| 3.Rigid Strain Relief |                 | Black  |
| 4.Heat Shrink Tube    |                 | Yellow |

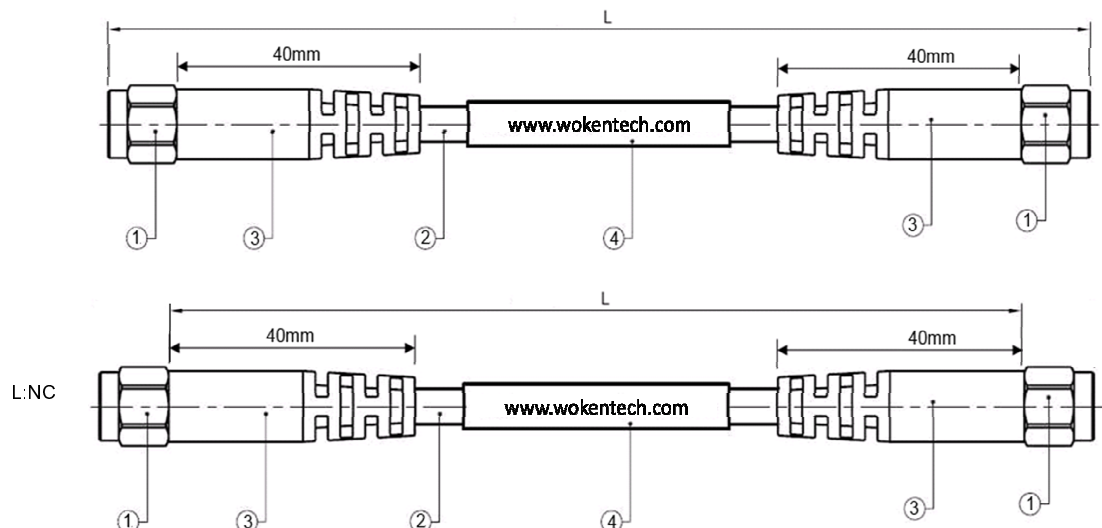


#### Mechanical

|            |            |
|------------|------------|
| Durability | 500 Cycles |
|------------|------------|

#### Outling Drawing (Unit:mm)

| DIMENSIONS  | TOLERANCES |
|-------------|------------|
| 0.5~10mm    | ±0.2       |
| 11~100mm    | ±5.0       |
| 101~500mm   | ±10.0      |
| 501~1000mm  | ±15.0      |
| 1001~2000mm | ±20.0      |
| 2000~5000mm | ±50.0      |



All Specification Changed Without Notification.



Wake up your further dream.



### SS402 Spiral Shielding Coaxial Cable Physical Characteristics

|                            |                                 |
|----------------------------|---------------------------------|
| Center Conductor           | 0.925±0.012mm SPCW              |
| Dielectric Diameter        | 2.97±0.03mm PTFE                |
| Inner Shield               | 3.20±0.03mm SPC TAPE            |
| Braid                      | 3.58±0.05mm SPC<br>91% Coverage |
| Jacket                     | 4.25±0.10mm FEP                 |
| Minimum Bend Radius Static | 10mm                            |

### SS402 Spiral Shielding Coaxial Cable Electrical Characteristics

|                                                                                     |                |                           |                  |
|-------------------------------------------------------------------------------------|----------------|---------------------------|------------------|
| Impedance                                                                           | 50 ± 2ohms     |                           |                  |
| Capacitance                                                                         | 94 pF/m (nom.) |                           |                  |
| Max. Operating Frequency                                                            | 18GHz          |                           |                  |
| Shielding Effect                                                                    | 100 dB(Min.)   |                           |                  |
| Operating Temperature                                                               | -65~ 180°C     |                           |                  |
| Velocity of propagation                                                             | 69.5%          |                           |                  |
|  | Frequency      | Typical Attenuation(dB/m) | Power (Watts CW) |
|                                                                                     | 0.4GHz         | 0.26                      | 515              |
|                                                                                     | 1GHz           | 0.39                      | 315              |
|                                                                                     | 2GHz           | 0.56                      | 218              |
|                                                                                     | 3GHz           | 0.75                      | 176              |
|                                                                                     | 5GHz           | 0.96                      | 136              |
|                                                                                     | 10GHz          | 1.48                      | 96               |
|                                                                                     | 18GHz          | 2.16                      | 62               |

整條 Assembly 之 Loss 為以下 3 項數值之加總

1. 接頭 Loss : 0.06 x  $\sqrt{\text{頻率}}$  (2 端都有接頭則需將此數值 x2)
2. 組裝 Loss : 0.12 (2 端都有組裝則需將此數值 x2)
3. 線材 Loss : 依上述 Maximum Attenuation 換算需求長度之 Loss
4. 晃動測試公差: I/L +/-0.2dB