



# 00100A1H6ACXXX

## Cable Assembly

### 6GHz SMA(M)-SAM(F) 2Hole for $\phi$ 1.37mm Cable Assembly

#### Features

- High Repeatability
- Low VSWR



#### Test Report

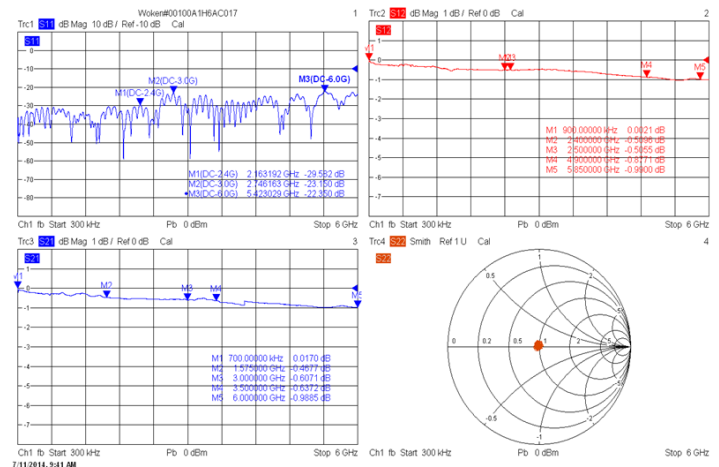
20cm

#### Electrical Specifications

|              |                         |
|--------------|-------------------------|
| Frequency    | DC-6GHz                 |
| VSWR         | 1.3:1(Max.)             |
| Impedance    | 50Ohm                   |
| Connection 1 | SMA Male                |
| Connection 2 | SMA Female 2Hole Flange |

#### Material

| Part                             | Material         | Plated |
|----------------------------------|------------------|--------|
| 1.SMA Connector                  |                  |        |
| Body                             | Brass            | Gold   |
| Center Pin                       | Brass            | Gold   |
| Insulator                        | Teflon           |        |
| 2.Adhesive shrink tube           |                  |        |
|                                  |                  | Black  |
| 3.Cable                          |                  |        |
| $\phi$ 1.37mm Mini Coaxial Cable |                  | Black  |
| 4.SMA Connector                  |                  |        |
| Body                             | Brass            | Gold   |
| Center Pin                       | Beryllium Copper | Gold   |
| Insulator                        | Teflon           |        |
| 5.Heat Shrink Tube               |                  |        |
|                                  |                  | Yellow |

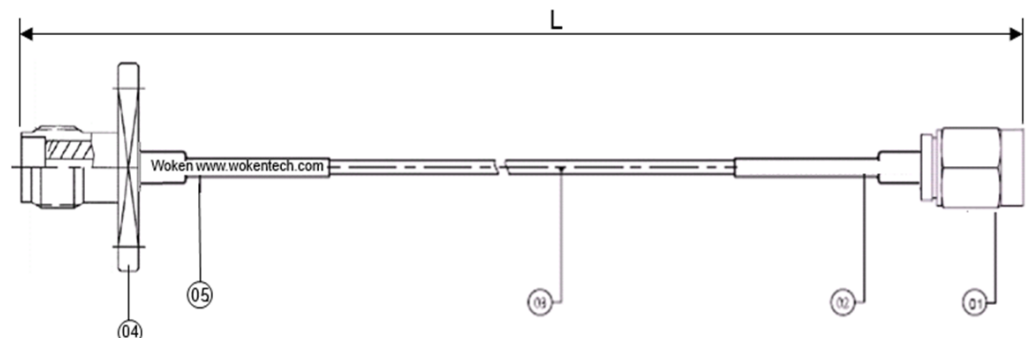


#### Mechanical

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      |





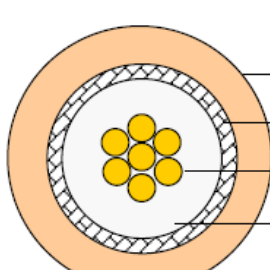
Wake up your further dream.



### φ 1.37mm Mini Coaxial Cable Physical Characteristics

|                     |                   |                                  |
|---------------------|-------------------|----------------------------------|
| Center Conductor    | Construction Size | 0.102±0.003mm                    |
|                     | Standard Diameter | 0.31mm Silver Coated Copper      |
| Insulation          | Average Thickness | 0.30mm                           |
|                     | Diameter          | 0.92±0.03mm FEP                  |
| Braid Shield        | Construction      | 16/6/0.050 ±0.003 mm             |
|                     | Coverage          | 95%                              |
|                     | Diameter          | 1.15±0.05mm Tinned Coated Copper |
| Jacket              | Average Thickness | 0.13mm                           |
|                     | Overall Diameter  | 1.37±0.05mm FEP(Black)           |
| Min. Bending Radius |                   | 9mm                              |

### φ 1.37mm Mini Coaxial Cable Electrical Characteristics

|                                                                                                                                                                    |                                    |      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|------|
| Impedance                                                                                                                                                          | 50 ± 3ohms                         |      |
| Operating Temperature                                                                                                                                              | -60~+105°C                         |      |
| Capacitance                                                                                                                                                        | 96±3pF/m                           |      |
| Conductor Resistance                                                                                                                                               | 335 ohms/KM at 20°C (max.)         |      |
| Operating Frequency                                                                                                                                                | 6GHz                               |      |
| Velocity of propagation                                                                                                                                            | 69%                                |      |
| <div>  <div> Jacket<br/>Braid Shield<br/>Conductor<br/>Insulation </div> </div> | Maximum Attenuation(dB/M) @ 1.8GHz | 2.20 |
|                                                                                                                                                                    | 2.4GHz                             | 2.60 |
|                                                                                                                                                                    | 2.45GHz                            | 2.60 |
|                                                                                                                                                                    | 5.2GHz                             | 3.90 |
|                                                                                                                                                                    | 5.8GHz                             | 4.30 |
|                                                                                                                                                                    | 6GHz                               | 4.30 |

整條 Assembly 之 Loss 為以下 3 項數值之加總

1. 接頭 Loss : 0.06 x √ 頻率 ( 2 端都有接頭則需將此數值 x2 )(I-PEX ,Murata Connector 不適用此公式)
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