



00100A5H643XXX

## Cable Assembly

### 9GHz IPEX-I (M)-Reverse SMA(F) for Ø1.37mm Cable Assembly

#### Features

- High Repeatability
- Low VSWR



#### Test Report

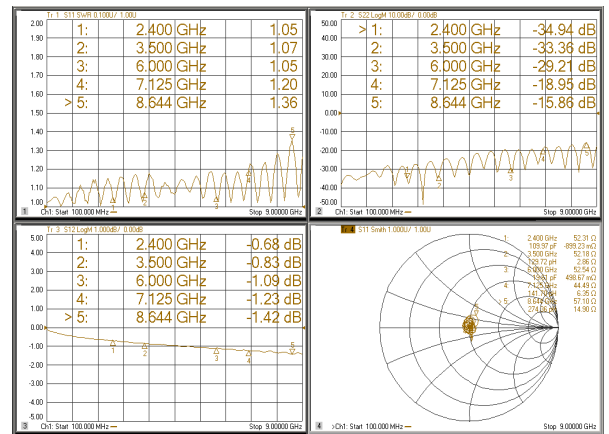
20cm:

#### Electrical Specifications

|                  |                                                   |
|------------------|---------------------------------------------------|
| Frequency        | DC-9GHz                                           |
| VSWR             | 1.3:1(Max.)@DC-7.125GHz<br>1.5:1(Max.)@7.125-9GHz |
| Impedance        | 50Ohm                                             |
| Connection 1     | Reverse SMA Female                                |
| Connection 2     | I-PEX-I Connector                                 |
| Mating Connector | 20279/20441                                       |

#### Material

| Part                       | Material        | Plated                                                 |
|----------------------------|-----------------|--------------------------------------------------------|
| 1.SMA Connector            |                 |                                                        |
| Body                       | Brass           | Gold                                                   |
| Center Pin                 | Brass           | Gold                                                   |
| Insulator                  | Teflon          |                                                        |
| 2.Heat Shrink Tube         |                 |                                                        |
|                            |                 | Yellow                                                 |
| 3.Cable                    |                 |                                                        |
| Φ1.37mm Mini Coaxial Cable |                 | Black/Gray/White                                       |
| 4.I-PEX Connector          |                 |                                                        |
| GND Contact                | Phosphor Bronze | All over Ni 1.00μm Min.<br>Contact part Au 0.05μm Min. |
| Housing                    | PBT             | UL94V-0,White                                          |
| Contact                    | Phosphor Bronze | All over Ni 1.00μm Min.<br>Contact part Au 0.10μm Min. |



#### Mechanical

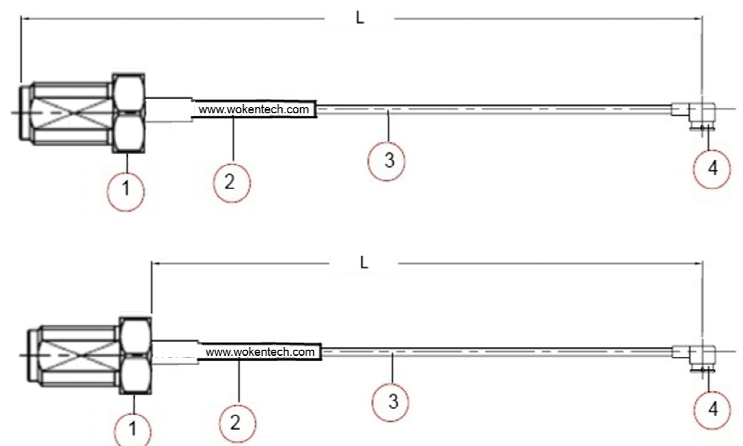
Durability

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      |

L=NC



All Specification Changed Without Notification.



Wake up your further dream.



### φ 1.37mm Mini Coaxial Cable Physical Characteristics

|                     |                   |                                    |
|---------------------|-------------------|------------------------------------|
| Center Conductor    | Construction Size | 7/0.102mm                          |
|                     | Standard Diameter | 0.306± 0.02mm Silver Coated Copper |
| Insulation          | Diameter          | 0.9±0.03mm FEP                     |
| Braid Shield        | Construction      | 16/5/0.050 mm                      |
|                     | Coverage          | 90±5%                              |
|                     | Diameter          | 1.13±0.05mm Tinned Coated Copper   |
| Jacket              | Overall Diameter  | 1.37±0.05mm FEP(Black/Gray/White)  |
| Min. Bending Radius |                   | 5mm                                |

### φ 1.37mm Mini Coaxial Cable Electrical Characteristics

|                                                                                                                |                                       |     |
|----------------------------------------------------------------------------------------------------------------|---------------------------------------|-----|
| Impedance                                                                                                      | 50 ± 2ohms                            |     |
| Operating Temperature                                                                                          | -55~+125℃                             |     |
| Capacitance                                                                                                    | 96±4pF/m                              |     |
| Operating Frequency                                                                                            | 10GHz                                 |     |
| Velocity of propagation                                                                                        | 70±2%                                 |     |
| VSWR                                                                                                           | 1.3@0-6GHz,1.4:1@6-8GHz,1.5:1@8-10GHz |     |
|  Maximum Attenuation(dB/M) @ | 1GHz                                  | 1.7 |
|                                                                                                                | 2GHz                                  | 2.5 |
|                                                                                                                | 3GHz                                  | 3.0 |
|                                                                                                                | 4GHz                                  | 3.5 |
|                                                                                                                | 5GHz                                  | 4.0 |
|                                                                                                                | 6GHz                                  | 4.5 |
|                                                                                                                | 7GHz                                  | 5.0 |
|                                                                                                                | 8GHz                                  | 5.4 |
|                                                                                                                | 9GHz                                  | 5.8 |
|                                                                                                                | 10GHz                                 | 6.3 |

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