

**Part No. WCBA-WCA04SM.SMXXX Series**

**18GHz WCA04 Flexible Cable Assembly SMA(M)-SMA(M)**



**Features:**

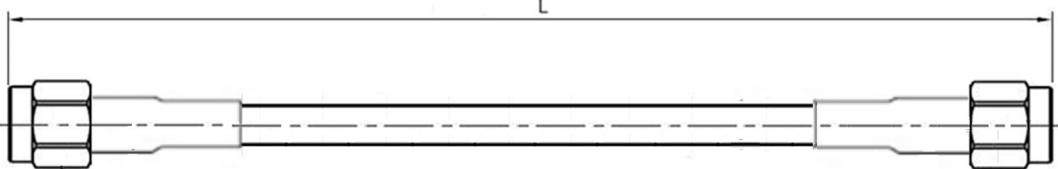
- Low Insertion Loss
- Excellent Phase Stability over Flexure



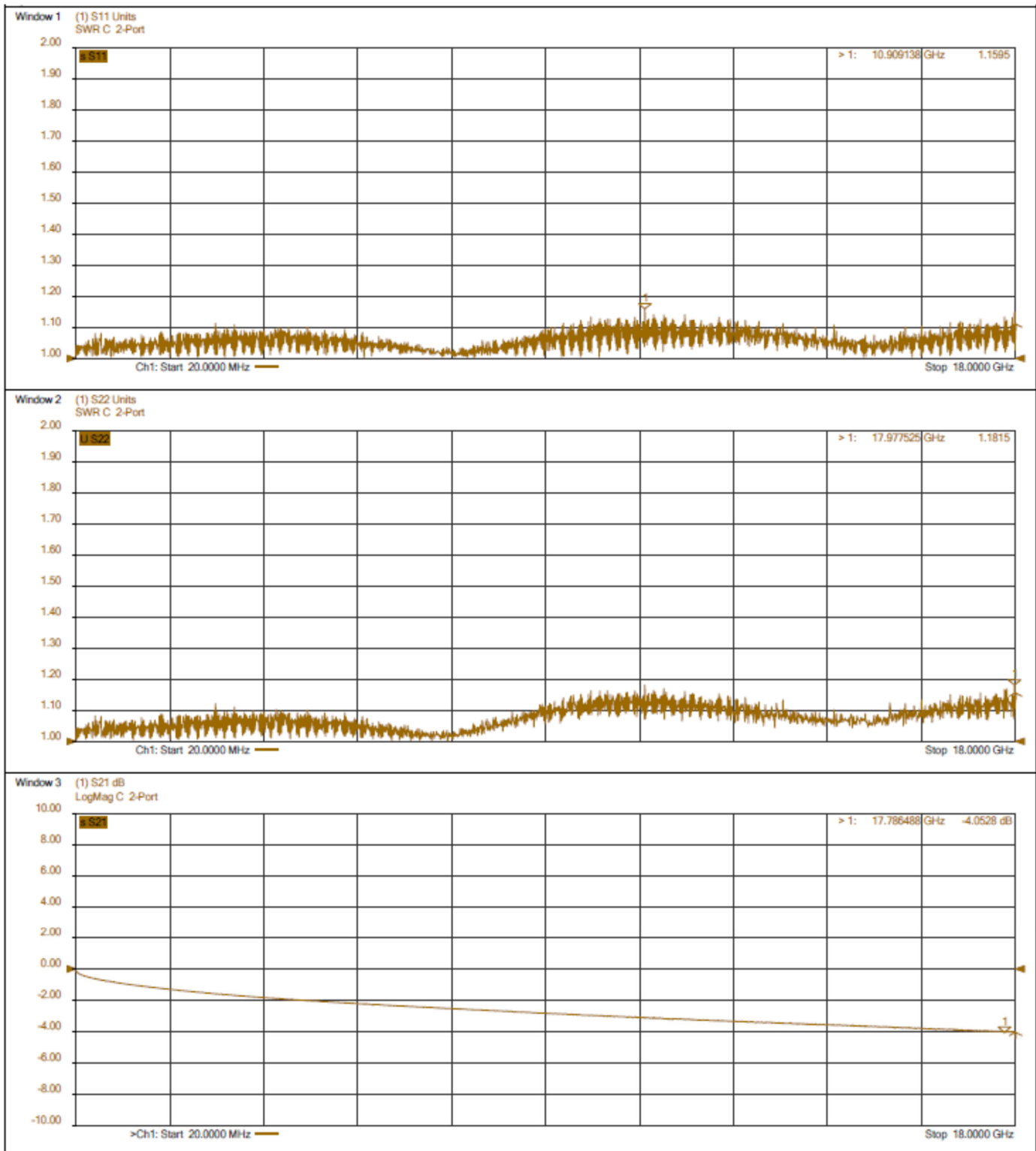
| WCA04 Raw Cable Electrical Specification |                      |      |      |      |      |      |      |      |
|------------------------------------------|----------------------|------|------|------|------|------|------|------|
| Cut-Off Frequency                        | 19GHz                |      |      |      |      |      |      |      |
| Operating Frequency                      | 18GHz                |      |      |      |      |      |      |      |
| Frequency                                | 0.5                  | 1    | 3    | 6    | 10   | 12.4 | 18   | GHz  |
| Attenuation                              | 0.10                 | 0.15 | 0.26 | 0.37 | 0.49 | 0.55 | 0.67 | dB/m |
| Power                                    | 2579                 | 1812 | 1030 | 717  | 547  | 488  | 399  | W    |
| Velocity of Propagation                  | 83%                  |      |      |      |      |      |      |      |
| Shielding Effectiveness                  | 90dB(Min.)           |      |      |      |      |      |      |      |
| Phase Stability                          | $\pm 3^\circ$ @18GHz |      |      |      |      |      |      |      |
| Amplitude stability                      | $\pm 0.1$ dB @18GHz  |      |      |      |      |      |      |      |
| Temp. Phase Stability PPM                | 750@-55~85°C         |      |      |      |      |      |      |      |
| Impedance                                | 50 ohm               |      |      |      |      |      |      |      |
| Min. Static Bending Radius               | 39mm                 |      |      |      |      |      |      |      |
| Min. Dynamic Bending Radius              | 78mm                 |      |      |      |      |      |      |      |

| WCA04 Raw Cable Mechanical / Material Specification |                             |          |
|-----------------------------------------------------|-----------------------------|----------|
| Description                                         | Material                    | Diameter |
| Center Conductor                                    | Silver Plated Copper        | 2.30 mm  |
| Dielectric                                          | PTFE                        | 6.20 mm  |
| Inner Braid                                         | Silver Plated Copper Ribbon | 6.44 mm  |
| Outer Braid                                         | Silver Plated Copper        | 7.16 mm  |
| Jacket                                              | FEP                         | 7.90 mm  |

| WCA04 Raw Cable Environmental Specification |             |
|---------------------------------------------|-------------|
| Operating Temperature                       | -55 ~+165°C |

| Cable Assembly Specification                                                                                      |                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| 18GHz WCA04 Flexible Cable Assembly SMA(M)-SMA(M)                                                                 |                                                                                                               |
| Part No.                                                                                                          | WCBA-WCA04SM.SMXXX<br>(XXX:Length,Unit: Meters)                                                               |
| Frequency                                                                                                         | 18GHz (max.)                                                                                                  |
| Connection 1                                                                                                      | SMA Male                                                                                                      |
| Connection 2                                                                                                      | SMA Male                                                                                                      |
| VSWR                                                                                                              | 1.2:1(max.)<br>Length $\geq 2.0\text{M}:1.25:1(\text{max.})$<br>Length $\leq 0.5\text{M}:1.25:1(\text{max.})$ |
| Outline<br>(Unit: Meters)<br>Unless Otherwise Specified<br>Linearity Tolerance:<br>100~200mm:±8mm<br>>200mm:±1.5% |                            |

## Test Report



SMA(M)-SMA(M) 600cm