

**Part No. WCBA-WCA02SM.SFXXX Series**

**18GHz WCA02 Flexible Cable Assembly SMA(M)-SMA(F)**



**Features:**

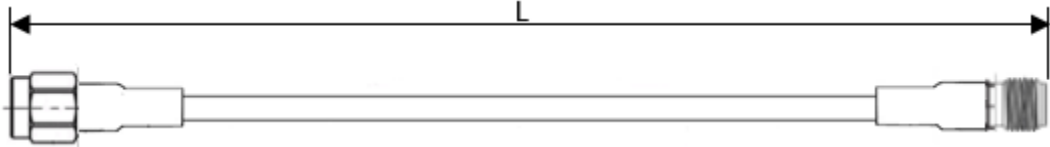
- Low Insertion Loss
- Excellent Phase Stability over Flexure



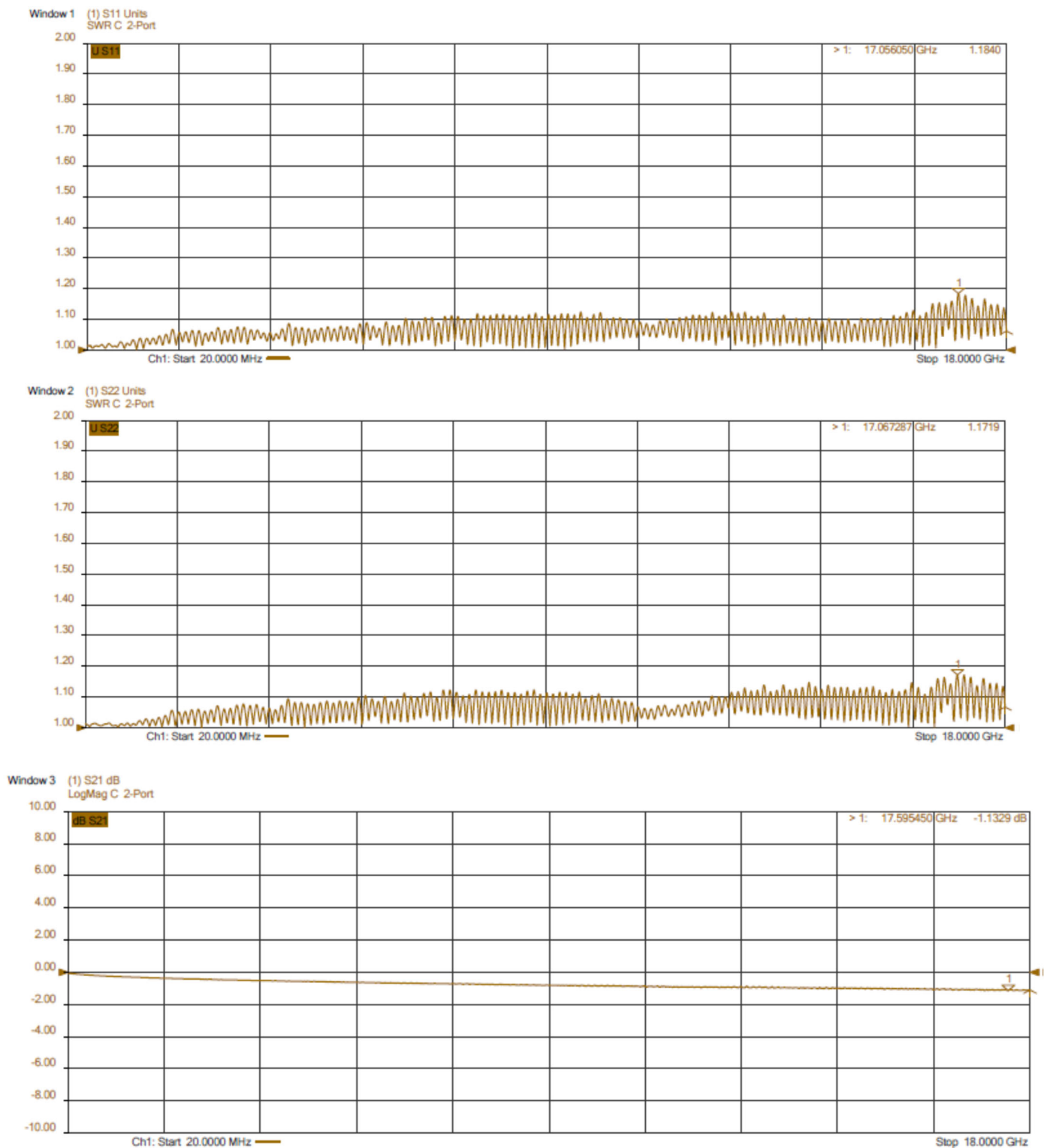
| WCA02 Raw Cable Electrical Specification |                        |      |      |      |      |      |      |      |
|------------------------------------------|------------------------|------|------|------|------|------|------|------|
| Cut-Off Frequency                        | 29GHz                  |      |      |      |      |      |      |      |
| Operating Frequency                      | 26.5GHz                |      |      |      |      |      |      |      |
| Frequency                                | 0.5                    | 1    | 6    | 10   | 12.4 | 18   | 26.5 | GHz  |
| Attenuation                              | 0.16                   | 0.23 | 0.59 | 0.76 | 0.85 | 1.04 | 1.28 | dB/m |
| Power                                    | 1305                   | 919  | 368  | 282  | 252  | 207  | 169  | W    |
| Velocity of Propagation                  | 83%                    |      |      |      |      |      |      |      |
| Shielding Effectiveness                  | 90dB(Min.)             |      |      |      |      |      |      |      |
| Phase Stability                          | $\pm 5^\circ$ @26.5GHz |      |      |      |      |      |      |      |
| Amplitude stability                      | $\pm 0.1$ dB           |      |      |      |      |      |      |      |
| Temp. Phase Stability PPM                | 750@-55~85°C           |      |      |      |      |      |      |      |
| Impedance                                | 50 ohm                 |      |      |      |      |      |      |      |
| Min. Static Bending Radius               | 25.5mm                 |      |      |      |      |      |      |      |
| Min. Dynamic Bending Radius              | 51.0mm                 |      |      |      |      |      |      |      |

| WCA02 Raw Cable Mechanical / Material Specification |                             |          |
|-----------------------------------------------------|-----------------------------|----------|
| Description                                         | Material                    | Diameter |
| Center Conductor                                    | Silver Plated Copper        | 1.45 mm  |
| Dielectric                                          | PTFE                        | 3.99 mm  |
| Inner Braid                                         | Silver Plated Copper Ribbon | 4.19 mm  |
| Outer Braid                                         | Silver Plated Copper        | 4.59 mm  |
| Jacket                                              | FEP                         | 5.10 mm  |

| WCA02 Raw Cable Environmental Specification |             |
|---------------------------------------------|-------------|
| Operating Temperature                       | -55 ~+165°C |

| Cable Assembly Specification                                                                                      |                                                                                    |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 18GHz WCA02 Flexible Cable Assembly SMA(M)-SMA(F)                                                                 |                                                                                    |
| Part No.                                                                                                          | WCBA-WCA02SM.SFXXX<br>(XXX:Length,Unit: Meters)                                    |
| Frequency                                                                                                         | 18GHz (max.)                                                                       |
| Connection 1                                                                                                      | SMA Male                                                                           |
| Connection 2                                                                                                      | SMA Female                                                                         |
| VSWR                                                                                                              | 1.2:1(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(F) 100cm