

C29S Series (SMA Male-ST to SMA Male-ST)

Superbend Cable Assembly, 50ohms, DC-26.5GHz



C29S-01-01-"L" (L: Length)

Maximum Ratings

Operating Temperature -55°C to +125°C

Storage Temperature -55°C to +125°C

Permanent damage may occur if any of these limits are exceeded

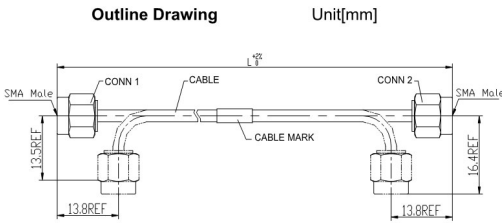
| | | |
|-------------------------|----------|------|
| Cable Diameter | 2.64mm | |
| Velocity of Propagation | 76% | |
| Shielding Effectiveness | >90dB | |
| Power Handling at 20°C | 1 GHz | 103W |
| | 6 GHz | 40W |
| | 12 GHz | 28W |
| | 18 GHz | 22W |
| | 26.5 GHz | 18W |
| Min. Bending Radius | 5mm | |

Features

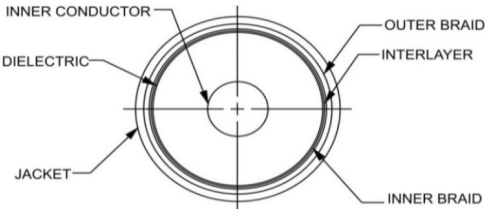
- Low loss
- Super flexible with minimum bending radius of 5mm
- High shielding effectiveness >90dB
- High retention force, >90N
- Eliminate the need for expensive right angle connector
- Very stable performance during flexing and shaking
 - Amplitude Stability: $\pm 0.08\text{dB}$@26.5GHz
 - Phase Stability vs. Flexure: $\pm 3^\circ$@26.5GHz (When wrapped 360° around a 26.4mm radius mandrel)

Applications

- 5G Massive MIMO and antenna OTA test
- 5G switch and attenuator matrixes systems
- In-box and board to board connection
- Lab and production line test
- Product temperature cycle test
- Military and commercial systems



Cable Cross Section



| Cable Construction | |
|--------------------|-----|
| Inner Conductor | - |
| Dielectric | - |
| Inner Braid | - |
| Outer Braid | - |
| Jacket | FEP |

| Connectors | |
|---------------------------------------|--|
| • Nut, Stainless steel, Passivated | |
| • Body, Stainless steel, Passivated | |
| • Center contacts, Brass, Gold plated | |
| • Dielectric, PTFE, Natural | |

Product Guarantee*

Micable will repair or replace your cable assembly if it fails within six months after shipment. This guarantee excludes product damage from misuse or abuse

Electrical Specifications at 25°C

| Freq. (GHz) | Length (m) | Insertion Loss (dB@GHz) | | | | | | | | VSWR (@GHz) | | | | | | | |
|-------------|------------|-------------------------|------|------|------|-------|------|---------|------|-------------|------|------|------|-------|------|---------|------|
| | | DC.-6 | | 6-12 | | 12-18 | | 18-26.5 | | DC.-6 | | 6-12 | | 12-18 | | 18-26.5 | |
| | | Typ. | Max. | Typ. | Max. | Typ. | Max. | Typ. | Max. | Typ. | Max. | Typ. | Max. | Typ. | Max. | Typ. | Max. |
| DC- 26.5 | 0.1 | 0.4 | 0.5 | 0.4 | 0.6 | 0.5 | 0.7 | 0.6 | 0.8 | 1.11 | 1.15 | 1.16 | 1.20 | 1.19 | 1.25 | 1.24 | 1.30 |
| | 0.2 | 0.5 | 0.6 | 0.6 | 0.8 | 0.8 | 1.0 | 0.9 | 1.2 | | | | | | | | |
| | 0.3 | 0.6 | 0.8 | 0.8 | 1.0 | 1.0 | 1.2 | 1.2 | 1.5 | | | | | | | | |
| | 0.4 | 0.8 | 0.9 | 1.0 | 1.2 | 1.1 | 1.5 | 1.6 | 1.9 | | | | | | | | |
| | 0.5 | 1.0 | 1.1 | 1.3 | 1.5 | 1.6 | 1.8 | 1.9 | 2.2 | | | | | | | | |

Typical Performance Data (C29S-01-01-0.3M)

| Frequency(MHz) | VSWR | Insertion Loss (dB) |
|----------------|------|---------------------|
| 50 | 1.02 | 0.08 |
| 1000 | 1.05 | 0.29 |
| 2000 | 1.06 | 0.35 |
| 2500 | 1.07 | 0.41 |
| 4000 | 1.09 | 0.46 |
| 5000 | 1.10 | 0.53 |
| 6000 | 1.11 | 0.59 |
| 7000 | 1.12 | 0.63 |
| 8000 | 1.13 | 0.67 |
| 9000 | 1.14 | 0.71 |
| 10000 | 1.15 | 0.76 |
| 12000 | 1.16 | 0.82 |
| 14000 | 1.17 | 0.89 |
| 16000 | 1.18 | 0.95 |
| 18000 | 1.19 | 1.04 |
| 26500 | 1.24 | 1.49 |

