

C29 Series (SMP Female-ST to SMP Female-RA)

Durable High Mechanical Strength .086 Cable Assembly, 50ohms, DC-26.5GHz



C29-37-38-"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 | 2.57mm | |
| Velocity of Propagation | 70% | |
| Shielding Effectiveness | >100dB | |
| Power Handling at 20°C | 1 GHz | 112W |
| | 6 GHz | 40W |
| | 12 GHz | 29W |
| | 18 GHz | 22W |
| | 26.5 GHz | 18W |
| Min. Bending Radius | 7.6mm | |

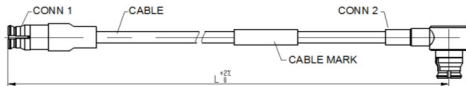
Features

- Very flexible with minimum bending radius of 7.6 mm
 - Superior mechanical strength by extra braiding layers
 - Excellent shielding effectiveness > 100 dB
 - Very stable performance during bending and shaking
 - Amplitude Stability: $\pm 0.08\text{dB}$@26.5GHz
 - Phase Stability vs. Flexure: $\pm 1.4^\circ$ @26.5GHz
- (When wrapped 360° around a 25.7mm radius mandrel)

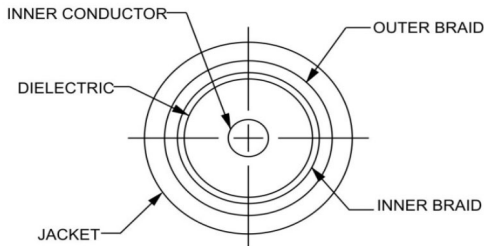
Applications

- In-box and board to board connection
- High-density integrated connection
- Lab and production line test
- 5G Massive MIMO and antenna OTA test
- 5G switch and attenuator matrices systems
- Military and commercial systems

Outline Drawing Unit[mm]



Cable Cross Section



| Cable Construction | |
|--|----------------------------|
| Inner Conductor | SPC, Solid |
| Dielectric | PTFE |
| Inner Braid | Silver-Plated Copper Strip |
| Outer Braid | High Strength Braid |
| Jacket | FEP |
| Connectors | |
| • Body, Berillium Copper, Gold plated | |
| • Center contacts, Berillium Copper, 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 | 0.2 | 0.6 | 0.7 | 0.7 | 0.9 | 0.8 | 1.1 | 1.1 | 1.4 | 1.15 | 1.20 | 1.17 | 1.25 | 1.23 | 1.35 | 1.40 | 1.50 |
| | 0.3 | 0.7 | 0.9 | 1.0 | 1.2 | 1.1 | 1.4 | 1.5 | 1.8 | | | | | | | | |
| | 0.5 | 1.0 | 1.2 | 1.5 | 1.7 | 1.8 | 2.1 | 2.4 | 2.7 | | | | | | | | |

Typical Performance Data (C29-37-38-0.3M)

| Frequency(MHz) | VSWR | Insertion Loss (dB) |
|----------------|------|---------------------|
| 50 | 1.02 | 0.08 |
| 1000 | 1.10 | 0.31 |
| 2000 | 1.10 | 0.40 |
| 2500 | 1.12 | 0.46 |
| 4000 | 1.12 | 0.54 |
| 5000 | 1.15 | 0.60 |
| 6000 | 1.13 | 0.66 |
| 7000 | 1.11 | 0.71 |
| 8000 | 1.14 | 0.76 |
| 9000 | 1.11 | 0.81 |
| 10000 | 1.15 | 0.85 |
| 12000 | 1.17 | 0.93 |
| 13000 | 1.19 | 0.96 |
| 15000 | 1.15 | 1.03 |
| 18000 | 1.23 | 1.14 |
| 26500 | 1.39 | 1.51 |

