



CELLFLEX® 3/8" superflexible cable

FEATURES / BENEFITS

• **Ultra Low Attenuation**

The reduced attenuation of CELLFLEX® coaxial cable results in extremely efficient signal transfer in your RF system, especially at high frequencies.

• **Complete Shielding**

The solid outer conductor of CELLFLEX® coaxial cable creates a continuous RFI/EMI shield that minimizes system interference.

• **Low VSWR**

Special low VSWR versions of CELLFLEX® coaxial cables contribute to low system noise.

• **Outstanding Intermodulation Performance**

CELLFLEX® coaxial cable's solid inner and outer conductors virtually eliminate intermods. Intermodulation performance is also confirmed with state-of-the-art equipment at the RFS factory.

• **High Power Rating**

Due to their low attenuation, outstanding heat transfer properties and temperature stabilized dielectric materials, CELLFLEX® cable provides safe long term operating life at high transmit power levels.

• **Wide Range of Application**

Typical areas of application are: feedlines for broadcast and terrestrial microwave antennas, wireless cellular, PCS and ESMR base stations, cabling of antenna arrays, and radio equipment interconnects



Technical features

INFORMATION

| | |
|---------------------|---|
| Applications | OEM jumpers, BTS inter-cabinet connections, GPS lines, intended for outdoor usage |
|---------------------|---|

STRUCTURE

| | | |
|---------------------------------|---------|---------------------------|
| Size | | 3/8 |
| Inner Conductor Diameter | mm (in) | 2.6 (0.102) |
| Inner Conductor Material | | Copper-Clad Aluminum Wire |
| Dielectric Diameter | mm (in) | 6.3 (0.248) |
| Dielectric Material | | Foam Polyethylene |
| Outer Conductor Diameter | mm (in) | 9.1 (0.358) |
| Outer Conductor Material | | Corrugated Copper |
| Jacket Diameter | mm (in) | 10.2 (0.402) |
| Jacket Material | | Black Polyethylene |

TESTING AND ENVIRONMENTAL

| | | |
|---------------------------------|---------|---|
| Phase Stabilized | | Phase stabilized and phase matched cables and accessories are available upon request. |
| Compliance | | DIN EN ISO 9001:2015 ISO 14001:2015 RoHS 2011/65/EU - China RoHS SJ/T 11364-2006 REACH (EC 1907/2006) UL1581 - UV Resistance Jacket IEC 60754-1/-2 |
| Installation Temperature | °C(°F) | -40 to 60 (-40 to 140) |
| Storage Temperature | °C (°F) | -70 to 85 (-94 to 185) |
| Operation Temperature | °C(°F) | -50 to 85 (-58 to 185) |



ELECTRICAL SPECIFICATIONS

| | | |
|--------------------------------|--|---------------|
| Impedance | Ω | 50 +/- 1 |
| Maximum Frequency | GHz | 13.4 |
| Velocity | % | 81 |
| Capacitance | pF/m (pF/ft) | 82 (25) |
| Inductance | uH/m (uH/ft) | 0.207 (0.063) |
| Peak Power Rating | kW | 11.9 |
| RF Peak Voltage | Volts | 1090 |
| Jacket Spark | Volt RMS | 5000 |
| Inner Conductor dc Resistance | Ω/1000 m (Ω/1000 ft) | 5.52 (1.68) |
| Outer Conductor dc Resistance | Ω/1000 m (Ω/1000 ft) | 7.3 (2.23) |
| Passive Intermodulation PIM | min. dBC | -160 |
| Return Loss (VSWR) Performance | Standard 20dB (1.222) / Premium 23/24dB (1.152/1.135) on specified frequencies | |

MECHANICAL SPECIFICATIONS

| | | |
|--|--------------|-------------------------|
| Cable Weight, Nominal | kg/m (lb/ft) | 0.1 (0.06) |
| Minimum Bending Radius, Repeated Bends | mm (in) | 25 (0.984) |
| Tensile Strength | N (lb) | 600 (135) |
| Recommended / Maximum Clamp Spacing | m (ft) | 0.25 / 0.25 (0.8 / 0.8) |

ATTENUATION @ 20°C (68°F) AND POWER RATING @ 40°C (104°F)

| Frequency, MHz | dB per 100m | dB per 100ft | Power, kW |
|----------------|-------------|--------------|-----------|
| 1 | 0.41 | 0.12 | 19.43 |
| 100 | 4.21 | 1.28 | 1.88 |
| 200 | 6.04 | 1.84 | 1.31 |
| 450 | 9.31 | 2.84 | 0.85 |
| 700 | 11.83 | 3.61 | 0.67 |
| 800 | 12.73 | 3.88 | 0.62 |
| 900 | 13.58 | 4.14 | 0.58 |
| 1800 | 20.05 | 6.11 | 0.39 |
| 2000 | 21.30 | 6.49 | 0.37 |
| 2200 | 22.51 | 6.86 | 0.35 |
| 2400 | 23.67 | 7.21 | 0.33 |
| 2700 | 25.35 | 7.73 | 0.31 |
| 3000 | 26.97 | 8.22 | 0.29 |
| 3500 | 29.55 | 9.01 | 0.27 |
| 4000 | 32.00 | 9.75 | 0.25 |
| 5000 | 36.62 | 11.16 | 0.22 |
| 13400 | 68.30 | 20.82 | 0.12 |



RELATED PRODUCTS

| Connector Interface | Premium Connector Series E01 | Premium Connector Series D01 *only on request |
|----------------------------|--|---|
| N Male | NM-SCF38-E01 | NM-SCF38-D01 |
| N Female | NF-SCF38-E01 | NF-SCF38-D01 |
| 4.3-10 Male | 43M-SCF38-E01 | |
| Mandatory Tool | TRIM-SET-S38-D01 | |
| Tool Information | Universal Trimming Tool For *-D01 And *-E01 Connector Series | |
| Installation Video | | |
| General Accessories | | |
| Hand Tool Kit | | TRIM-T01 |
| Grounding Kit | | EAR-38-S |

[External Document Links](#)

[CELLFLEX Drum Selection Guide](#)

[Notes](#)