



CELLFLEX® 3/8" superflexible cable support CBRS, C-Band and LAA up to 6GHz; flame retardant/ halogen free jacket

FEATURES / BENEFITS

- Low Attenuation**
The low attenuation of CELLFLEX® coaxial cable results in highly efficient signal transfer in your RF system.
- 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 Technologies 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.
- Meets or Exceeds: IEC 60754-1, -2; IEC 60332-1-1, -2; IEC 61034-1, -2; IEC 60332-3-24 (formerly IEC 60332-3-C)**



3/8" CELLFLEX® Superflexible Foam Dielectric Coaxial Cable

Technical features

APPLICATIONS

| Applications | | Indoor | Wireless Communication | HF Defense | Microwave | Mobile Radio | Cable Solutions |
|--------------|--|--------|------------------------|------------|-----------|--------------|-----------------|
|--------------|--|--------|------------------------|------------|-----------|--------------|-----------------|

STRUCTURE

| | | |
|--------------------------|---------|--|
| Size | | 3/8 |
| Jacket Option | | Black |
| Inner Conductor Diameter | mm (in) | 2.6 (0.1) |
| Inner Conductor Material | | Copper-Clad Aluminum Wire |
| Dielectric Diameter | mm (in) | 6.3 (0.25) |
| Dielectric Material | | Foam Polyethylene |
| Outer Conductor Diameter | mm (in) | 9.1 (0.36) |
| Outer Conductor Material | | Corrugated Copper |
| Jacket Diameter | mm (in) | 10.2 (0.4) |
| Jacket Material | | Polyethylene, PE, Metalhydroxite Filling |
| Cable Type | | Foam-Dielectric, Superflexible |



TESTING AND ENVIRONMENTAL

| | | |
|--|---------|---|
| Fire Performance | | Flame Retardant, LS0H |
| Flame Retardant Jacket Specifications | | Meets/Exceeds: IEC 60754-1, -2; IEC 60332-1, -3.C; UL 1581; UL 1666; NEC type CATVR; CPR: https://products.rfsworld.com/userfiles/cpr/rfs-products-cpr-compliance.pdf |
| Installation Temperature | °C(°F) | -25 to 60 (-13 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) | 5.3 (1.68) |
| Outer Conductor dc Resistance | Ω/1000 m (Ω/1000 ft) | 5.6 (2.23) |
| Return Loss (VSWR) Performance | | 20 (1.22) @ 450-617 MHz 24 (1.13) @ 617-960 MHz 24 (1.13) @ 1695-2200 MHz 20 (1.22) @ 2300-2700 MHz 18 (1.28) @ 3500-4200 MHz 16 (1.37) @ 5150-6000 MHz |
| Phase Stabilized | | Phase stabilized and phase matched cables and assemblies are available upon request. |
| Temperature & Power | | Standard |

MECHANICAL SPECIFICATIONS

| | | |
|---|--------------|-------------------------|
| Cable Weight, Nominal | kg/m (lb/ft) | 0.12 (0.06) |
| Minimum Bending Radius, Repeated Bends | mm (in) | 25 (1) |
| Bending Moment | Nm (lb-ft) | 1.4 (1) |
| 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 |
|----------------|-------------|--------------|-----------|
| 0.5 | 0.29 | 0.09 | 11.90 |
| 1 | 0.41 | 0.12 | 11.90 |
| 1.5 | 0.50 | 0.15 | 11.90 |
| 2 | 0.58 | 0.18 | 11.90 |
| 10 | 1.30 | 0.40 | 6.10 |
| 20 | 1.84 | 0.56 | 4.29 |
| 30 | 2.27 | 0.69 | 3.49 |
| 50 | 2.94 | 0.90 | 2.68 |
| 88 | 3.94 | 1.20 | 2.01 |
| 100 | 4.21 | 1.28 | 1.88 |
| 108 | 4.38 | 1.34 | 1.80 |
| 150 | 5.20 | 1.58 | 1.52 |
| 174 | 5.62 | 1.71 | 1.41 |
| 200 | 6.04 | 1.84 | 1.31 |
| 300 | 7.49 | 2.28 | 1.05 |
| 400 | 8.74 | 2.66 | 0.90 |
| 450 | 9.31 | 2.84 | 0.85 |
| 500 | 9.85 | 3 | 0.80 |
| 512 | 9.98 | 3.04 | 0.79 |
| 600 | 10.87 | 3.31 | 0.73 |
| 700 | 11.83 | 3.61 | 0.67 |
| 800 | 12.73 | 3.88 | 0.62 |
| 824 | 12.94 | 3.94 | 0.61 |
| 894 | 13.53 | 4.12 | 0.58 |
| 900 | 13.58 | 4.14 | 0.58 |
| 925 | 13.79 | 4.20 | 0.57 |
| 960 | 14.08 | 4.29 | 0.56 |
| 1000 | 14.40 | 4.39 | 0.55 |
| 1250 | 16.31 | 4.97 | 0.48 |
| 1500 | 18.08 | 5.51 | 0.44 |
| 1700 | 19.41 | 5.92 | 0.41 |
| 1800 | 20.05 | 6.11 | 0.39 |
| 2000 | 21.30 | 6.49 | 0.37 |
| 2100 | 21.90 | 6.68 | 0.36 |
| 2200 | 22.50 | 6.86 | 0.35 |
| 2400 | 23.70 | 7.21 | 0.33 |



| | | | |
|-------|-------|-------|------|
| 3000 | 27 | 8.22 | 0.30 |
| 3500 | 29.50 | 8.22 | 0.29 |
| 4000 | 32 | 9.75 | 0.25 |
| 5000 | 36.60 | 11.16 | 0.22 |
| 6000 | 41 | 12.48 | 0.19 |
| 7000 | 45.10 | 13.74 | 0.18 |
| 8000 | 49 | 14.94 | 0.16 |
| 9000 | 52.80 | 16.09 | 0.15 |
| 10000 | 56.50 | 17.21 | 0.14 |
| 12000 | 63.50 | 19.37 | 0.12 |
| 13400 | 68.30 | 20.82 | 0.12 |

External Document Links

Notes

Phase stabilized versions available upon request.

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