PRODUCT DATASHEET

LCF78-50JFNA HW25070164

7/8" CELLFLEX® Premium Attenuation Low-Loss Foam-Dielectric Coaxial Cable

CELLFLEX®7/8" premium attenuation low loss flexible cable

Feature / Benefits

- **Ultra Low Attenuation**
  The further reduced attenuation of CELLFLEX® premium attenuation coaxial cable results in extremly 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.
- **HW Code 25070164**
- **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)**

Technical features

APPLICATIONS

Applications	Indoor, Wireless Communication, TV & Radio, HF Defense, Microwave, Mobile Radio, Cable Solutions

STRUCTURE

Cable Type	Foam-Dielectric, Corrugated
Size	7/8
Inner Conductor Diameter	9mm (0.354in)
Inner Conductor Material	Copper Tube
Dielectric Diameter	22.5mm (0.886in)
Dielectric Material	Foam Polyethylene
Outer Conductor Diameter	24.9mm (0.98in)
Outer Conductor Material	Corrugated Copper
Jacket Diameter	27.5mm (1.083in)
Jacket Material	Black Polyethylene, Metalhydroxite Filling

TESTING AND ENVIRONMENTAL

Fire Performance	Flame Retardant, LSZH, OI≥30
Flame Retardant Jacket Specifications	Meets/Exceeds: IEC 60754-1, -2; IEC 60332-1-1, -2; IEC 61034-1, -2; IEC 60332-3-24 (formerly IEC 60332-3-C);
Installation Temperature	-25°C to 60°C (-13°F to 140°F)
Storage Temperature	-30°C to 80°C (-22°F to 176°F)
Operation Temperature	-30°C to 80°C (-22°F to 176°F)

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ELECTRICAL SPECIFICATIONS

Impedance	50 +/- 1 Ω
Maximum Frequency	5 GHz
Velocity	88 %
Capacitance	74pF/m (22.5pF/ft)
Inductance	0.185µH/m (0.056µH/ft)
Peak Power Rating	85 kW
RF Peak Voltage	2920 Volts
Jacket Spark	8000 Volt RMS
Inner Conductor dc Resistance	1.55ohm/1000 m (0.57ohm/1000 ft)
Outer Conductor dc Resistance	1.40ohm/1000 m (0.43ohm/1000 ft)

MECHANICAL SPECIFICATIONS

Cable Weight	0.43kg/m (0.29lb/ft)
Minimum Bending Radius	120mm (5in)
Minimum Bending Radius	250mm (10in)
Bending Moment	13 (10)
Tensile Strength	1440N (324lb)
Recommended / Maximum Clamp Spacing	0.8 / 1 (2.75 / 3.25)

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

Frequency, MHz	dB per 100m	dB per 100ft	Power, kW
894	4.05	1.23	2.8
1000	4.30	1.31	2.7
1800	6.04	1.84	1.9
2000	6.39	1.95	1.8
2200	6.77	2.06	1.7
2500	7.3	2.22	1.6
2700	7.63	2.32	1.5
3500	8.91	2.71	1.3
5000	11.09	3.38	1.1

External Document Links

Notes

Related Documents

WINS Value Proposition
Value Propositions

TML Value Proposition
Value Propositions