

CMC Radiating Coaxial Cable

CMC 50D-12

PRODUCT DESCRIPTION

- The cable is used as a distributed antenna to provide communications in tunnels, subway mines, large building complexes, and any other application in confined areas.
- Slots in the copper outer conductor allow a controlled portion of the internal RF energy to be radiated into the surrounding environment and can be designed individually.
- With the broadband capability of 75~3000MHz, this cable is used for both one-way and two-way communication systems, and a single radiating cable can handle multiple communication systems simultaneously.



CONSTRUCTION

Inner conductor	Copper clad aluminum wire	Φ 4.80mm
Insulation	Physically foamed PE	Φ 12.20mm
Outer conductor	Corrugated copper tube with double row milled slots	Φ 13.80mm
Jacket	Non-halogenated, fire retardant PE	Φ 15.80mm

MECHANICAL PROPERTIES

Minimum bending radius	mm	80
Tensile force	N	1130

ELECTRICAL PROPERTIES

Impedance	Ω	50±2
Capacitance	pF/m	75
Propagation velocity	%	88
DC breakdown voltage	kV	6
Insulation resistance	MΩ•km	>10000

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TRANSMISSION PROPERTIES

Frequency	Nom. attenuation	Coupling loss(50%/95%)
MHz	@20 °C,dB/100m	@20 °C,dB
150	3.21	57 / 69
450	5.80	66 / 78
900	8.60	66 / 78
1800	13.50	67 / 79
1900	13.90	70 / 82
2200	14.70	78 / 90
2400	15.50	83 / 95

Attenuation & Coupling loss test method : IEC 61196-4.

VSWR

Tested in customers' operating band	≤1.3
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ENVIRONMENTAL PROPERTIES

Recommended storage temperature	°C	-70~+85
Recommended installation temperature	°C	-25~+60
Recommended operating temperature	°C	-40~+85