

## CMC Radiating Coaxial Cable

### CMC 50D-114L

#### 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	Smooth copper tube	Φ13.20mm
Insulation	Physically foamed PE	Φ32.80mm
Outer conductor	Corrugated copper tube with double row milled slots	Φ35.80mm
Jacket	Non-halogenated, fire retardant PE	Φ39.40mm

#### MECHANICAL PROPERTIES

Minimum bending radius	mm	200
Tensile force	N	2500

#### ELECTRICAL PROPERTIES

Impedance	Ω	50±2
Capacitance	pF/m	75
Propagation velocity	%	88
DC breakdown voltage	kV	10
Insulation resistance	MΩ•km	>10000

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#### TRANSMISSION PROPERTIES

Frequency MHz	Nom. attenuation @20 °C,dB/100m	Coupling loss (50%/95%) @20 °C,dB
150	1.22	70 / 80
450	2.22	81 / 93
900	3.31	80 / 92
1800	5.18	77 / 88
1900	5.35	76 / 88
2200	5.92	77/ 88
2400	6.19	79 / 90

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