

# PRODUCT SPECIFICATION

## 50 Ohm Coaxial Feeder Cable

### RF50 1/2" S

#### PRODUCT DESCRIPTION



- The high-performance of attenuation allows coaxial cable to be used in different RF systems, such as 3G, 4G mobile communication.
- Wide range of applications, such as indoor distribution, broadcast, various base stations, wireless cellular, and others.
- Lower VSWR, perfect shielding effectiveness, and extraordinary inter-modulation performance lead to fewer energy loss and outer interference.

#### CONSTRUCTION

Inner conductor	Copper Clad Aluminum	Φ 3.60mm
Insulation	Physically foamed PE	Φ 9.20mm
Outer conductor	Helical corrugated copper	Φ 12.00mm
Jacket	Black PE	Φ 13.60mm

#### MECHANICAL PROPERTIES

Min. single bending radius	mm	25
Min. repeated bending radius	mm	30
Max. tensile force	N	760
Recommended maximum clamp spacing	m	1

#### ELECTRICAL PROPERTIES

Impedance	Ω	50±1
Nominal capacitance	pF/m	82
Nominal inductance	μH/m	0.20
Propagation velocity	%	81
DC breakdown voltage	kV	2.5
Insulation resistance	MΩ•km	>5000
Peak power rating	kW	15.5
Cut-off frequency	GHz	13.1
Screening attenuation	dB	>120
PIM	dBc@(2×20W)	≤-160

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#### TRANSMISSION PROPERTIES

Frequency	Attenuation	Power
MHz	@20°C, dB/100m(dB/100ft)	@20°C, kW
100	3.41(1.04)	3.08
450	7.59(2.31)	1.38
690	9.58(2.92)	1.15
800	10.40(3.17)	1.01
900	11.20(3.41)	0.94
1000	11.80(3.60)	0.88
1800	16.60(5.06)	0.63
2000	17.60(5.37)	0.60
2200	18.61(5.67)	0.56
2400	19.59(5.97)	0.54
2500	20.07(6.12)	0.53
2600	20.55(6.27)	0.52
2700	21.02(6.41)	0.50
3000	22.40(6.83)	0.47

Attenuation values may be with a tolerance of 5%.

#### VSWR

690-960MHz	≤	1.12
1700-2200MHz	≤	1.12
2300-2400MHz	≤	1.12
2500-2690MHz	≤	1.15

#### ENVIRONMENTAL PROPERTIES

Storage, °C	-55~+80
Installation, °C	-40~+60
Operation, °C	-55~+80
2011/65EU(ROHS)	compliant