

Coaxial Cable 1/2"

50 Ohm Coaxial Feeder Cable, 100 – 3800 MHz

MIC360°
IN-BUILDING COMPONENTS by MIC



- Foam Dielectric Coaxial Cable
- Size: 1/2"
- Impedance: 50 ohm
- Low PIM, low VSWR
- Flame retardant
- CPR rating: B2ca
- 200m / drum

Electrical Specification		
Product number		421 001 002
Impedance	Ω	50 ± 2
Capacitance	pF/m	76
Inductance	$\mu\text{H/m}$	0.19
Propagation velocity	%	86
DC breakdown voltage	kV	4
Max operating frequency	GHz	8.8
Cut-off frequency	GHz	8.8
Insulation resistance	M Ω km	>5000
Peak power rating	kW	40
PIM	dBc@(2x20W)	≤ -160
Environmental Specification		
2011/65EU (RoHS)		Compliant
EN50575 CPR Class		B2ca
Storage temperature	$^{\circ}\text{C}$	-30 to +80
Operating temperature	$^{\circ}\text{C}$	-30 to +80
Installation temperature	$^{\circ}\text{C}$	-25 to +60
Mechanical Specification		
Outer conductor		Ring corrugated copper
Inner conductor		Copper Clad Aluminum
Jacket material		PE (Black) Flame retardant
Dielectric material		Physically foamed PE
Diameter over jacket	mm	15.7 ± 0.2
Diameter over outer conductor	mm	13.8 ± 0.2
Diameter over dielectric	mm	12.2 ± 0.2

Diameter over inner conductor	mm	4.8 ± 0.05
Min. bending radius, single	mm	70
Min. bending radius, multiple	mm	125
Max. tensile force	N	1130
Max. Clamp spacing	m	1
Min. connector pull-off force	N	200
Bending moment	Nm	3.8

Transmission properties

Frequency (MHz)	Attenuation (dB/100m)	Average Power (kW)
100	2.17	3.49
450	4.75	1.59
690	5.97	1.34
800	6.46	1.17
900	6.85	1.10
1000	7.28	1.04
1800	10.10	0.75
2000	10.70	0.71
2400	11.78	0.62
2500	12.06	0.61
2700	12.61	0.59
3000	13.40	0.57
3400	14.40	0.53
3500	14.64	0.52
3800	15.36	0.50

Values at 20°C ambient temperature

VSWR

Frequency (MHz)	VSWR
380 – 470	1.13
690 – 960	1.13
1700 – 2200	1.13
2300 – 2400	1.13
2500 – 2690	1.15
3300 – 3800	1.25

