



Order Information

Item No.: **RF50-1/2 CABLE**

Series No. **S1007**

Cable Structure

Inner conductor	Copper clad aluminum	ϕ 4.80 $\pm$ 0.05mm
Insulation	Foamed polyethylene	ϕ 12.20 $\pm$ 0.20mm
Outer conductor	Helical corrugated copper tube	ϕ 13.8 $\pm$ 0.15mm
Jacket	PE, Black	ϕ 15.70 $\pm$ 0.20mm

Mechanical Properties

Min. single bending radius	50mm
Min. repeated bending radius	125mm
Tensile force	1050 N

Electrical properties

Max DC resistance (Inner conductor)	1.62 Ω /km
Max DC resistance (Outer conductor)	3.55 Ω /km
Characteristic impedance	50 $\pm$ 1 Ω
Nominal capacitance	76 pF/m
Propagation velocity	87%
DC breakdown voltage	6.0 KV
Insulation Resistance	> 1 x 10 ⁴ M Ω .km
Cut-off frequency	8.8 Ghz

Environmental properties

Storage temperature -70 ~ +85 °C

Installation temperature -40 ~ +60 °C

Operation temperature -55 ~ +85 °C

VSWR & PIM

800Mhz-1000Mhz ≤ 1.10

1700Mhz-2300Mhz ≤ 1.13

2200Mhz-4000Mhz ≤ 1.15

PIM $\leq -160\text{dBc @}2\text{x}20\text{w}$

Attenuation

Frequency (Mhz)	Attenuation@20°C, dB/100m	Power@20°C, kW
100	2.17	3.52
200	3.12	2.25
300	3.85	1.98
400	4.56	1.7
450	4.75	1.59
800	6.46	1.17
900	6.86	1.1
1000	7.28	1.04
1800	10.1	0.75
2000	10.72	0.71
2200	11.26	0.67
2500	12.13	0.62
2700	12.7	0.6
3000	13.41	0.57
3500	14.7	0.53
3800	15.36	0.51
4000	15.85	0.5

※ Attenuation values may be with a tolerance of 5%.