

**Order Information**

Item No.: **RF50-7/8L CABLE**

Series No. **S1006**

Cable Structure

Inner conductor	Copper tube	ϕ 9.45 $\pm$ 0.10mm
Insulation	Foamed polyethylene	ϕ 22.60 $\pm$ 0.30mm
Outer conductor	Annular corrugated copper tube	ϕ 25.40 $\pm$ 0.20mm
Jacket	PE black	ϕ 27.50 $\pm$ 0.25mm

Mechanical Properties

Min. single bending radius	130mm
Min. repeated bending radius	250mm
Tensile force	1450 N
Cable weight	340kg/km

Electrical properties

Max DC resistance (Inner conductor)	2.50 Ω /km
Max DC resistance (Outer conductor)	2.00 Ω /km
Impedance	50 $\pm$ 1 Ω
Nominal capacitance	76 pF/m
Propagation velocity	89%
DC breakdown voltage	10.0 KV
Jacket Spark Test Voltage	8000 Vrms
Insulation Resistance	$> 1 \times 10^4$ M Ω .km
Cut-off frequency	5.2 Ghz
Peak Power Rating	90 KW
Shielding Attenuation	$\geq$ 120 dB

Environmental properties

Storage temperature -70 ~ +85 °C

Installation temperature -40 ~ +60 °C

Operation temperature -55 ~ +85 °C

VSWR & PIM

VSWR @800Mhz-1000Mhz ≤ 1.13

VSWR @1700Mhz-2700Mhz ≤ 1.15

VSWR @3300Mhz-4000Mhz ≤ 1.20

PIM (3rd order, 2*20w) ≤ -160 dBc

Attenuation

Frequency (Mhz)	Attenuation (dB/100m)	Power(kW)
100	1.11	9.30
200	1.60	6.40
300	1.99	4.82
400	2.31	4.16
450	2.49	3.81
800	3.45	2.75
900	3.62	2.62
1000	3.85	2.56
1800	5.36	1.79
2000	5.62	1.70
2200	6.01	1.60
2500	6.48	1.48
2700	6.79	1.23
3000	7.20	1.17
3500	7.78	1.05
3800	8.15	0.97
4000	8.78	0.92

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

※ Attenuation, VSWR 1.0 Ambient Temperature 20°C

※ Average Power, VSWR 1.0 Ambient Temperature 40°C

※ Average Power, Inner Conductor Temperature 100°C