

**Order Information**

Item No.:	RF50-7/8L CABLE
Series No.	S1006

Cable Structure

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

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 $\pm 1 \Omega$
Nominal capacitance	76 pF/m
Propagation velocity	89%
DC breakdown voltage	10.0 KV
Jacket Spark Test Voltage	8000 Vrms
Insulation Resistance	$> 1 \times 10^4 \text{ M}\Omega.\text{km}$
Cut-off frequency	5.2 Ghz
Peak Power Rating	90 KW
Shielding Attenuation	$\geq 120 \text{ dB}$

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