

TECHNICAL SPECIFICATION

1. GENERAL

1.1 Scope

Product Name	Part Number
7/8" Radio Frequency Coaxial Cable	103000045

2. CONSTRUCTION and PARAMETERS

2.1 Cable Construction



2.2 Dimensions

Item	Outer Diameter(mm)	Material
Inner conductor	9.00±0.10	Smooth Copper tube
Insulation	22.30±0.20	Foamed polyethylene
Outer copper conductor	24.60±0.30	Sin wave corrugated copper tube
Jacket	27.40±0.30	Polyethylene (UV protection)* Halogen Free

*Note: The PE jacket is UV resistant, but not UL certified

2.3 Mechanical Properties

Minimum bending radius (single)	125mm
Minimum bending radius (repeated)	250mm
Approx. weight	412kg/km
Max. tensile force	1444N
Bending moment	13.5Nm
Maximum clamp spacing	0.85m

2.4 Electrical Properties

Max. operation frequency	6.0GHz
Return loss (0-2700MHz)	≥21.2dB
Lay environment temperature	-20 ~ +70°C
Operation temperature	-40 ~ +60°C
Characteristics impedance	50±2Ω

Velocity		83%
Min. insulation resistance		11000 MΩ·km @DC 500V ,1 minute
Capacitance		76 pF/m
Dielectric strength		DC 1000V 1 minute
VSWR typical value		≤1.20@820~960MHz
		≤1.20@1710~2500MHz
Peak power rating (kW)		86
RF Peak voltage rating (V)		2930
Jacket spark test RMS/ (V)		8100
DC-resistance inner conductor/(Ω/km)		1.53
DC-resistance outer conductor/ (Ω/km)		1.58
Power rating(kW)	900 MHz	2.35
	1800 MHz	1.54
	2100 MHz	1.32
	2700 MHz	1.22
Attenuation(dB/100m)*	900 MHz	3.69
	1800 MHz	5.40
	2100 MHz	5.95
	2700 MHz	6.82

*Note: The tolerance of attenuation shall be ± 5%