# FC75AD-78-PE-01 SDY-75-22





Air dielectric coaxial cable, corrugated copper tube for outer conductor and smooth copper tube for inner conductor, air dielectric with PE support, 7/8 in, black PE jacket

### **General Specifications**

Flexibility	Standard
Jacket Color	Black
Performance Note	Attenuation guaranteed within the tolerance $\pm 10\%$
Structure Note	Dimension guaranteed within the tolerance $\pm 5\%$
Nominal Size	7/8 in

### **Material Specifications**

Inner Conductor	Smooth Copper Tube
Dielectric	Air Dielectric with PE Support
Outer Conductor	Corrugated Copper Tube
Jacket	Black PE
Diameter of Inner Conductor	9.30 mm
Diameter of Dielectric	20.80 mm
Diameter of Outer Conductor	25.20 mm
Diameter of Jacket	29.00 mm

## **Electrical Specifications**

Impedance	75 ohms±1 ohm
Maximum Available Frequence	3.0 GHz
Cut-off Frequency	6.0 GHz
Velocity Ratio	93%
Peak Power	73 kW
Insulation Resistance	3000 MΩ·km
DC Breakdown Voltage	2700 V
Nominal Capacitance	71 pF/m
Nominal Inductance	0.19 µH/m



### Attenuations

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.08	0.02	73.0
1	0.12	0.04	73.0
1.6	0.15	0.05	68.0
3	0.20	0.06	50.0
6	0.29	0.09	35.0
10	0.37	0.11	27.0
20	0.52	0.16	19.2
30	0.64	0.2	12.6
100	1.19	0.36	6.80
200	1.69	0.52	4.80
500	2.72	0.83	2.99
800	3.50	1.07	2.34
1000	3.92	1.19	2.08
2000	5.85	1.78	1.43



#### Return Loss / VSWR

Frequency Band	VSWR	Return Loss (dB)	Tolerance
550-1600 KHz	1.10	26.4	5%
87-108 MHz	1.10	26.4	5%
1CH-12CH Specified Channel	1.15	23.1	5%
13CH-24CH Specified Channel	1.15	23.1	5%
25CH-68CH Specified Channel	1.15	23.1	5%

#### **Mechanical Specifications**

Bending Radius (Single)	≥90 mm
Bending Radius (Repeated)	≥300 mm
Number of Bending (Typical)	≤15
Tensile Strength	2800N

#### **Environmental Specifications**

Installation Temperature	-20 °C to +55 °C
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +85 °C

### **Regulatory Compliances**

ISO 9001:2015	Compliant
ROHS	Compliant
China RoHS	Compliant
UK RoHS	Compliant
REACH	Compliant
EU/CE	Compliant

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