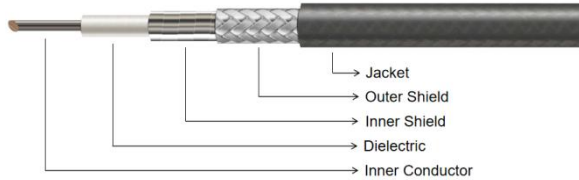


FS830A

18GHz, 50 Ohm, Φ8.3mm, FEP Jacket, Flexible Cable. Solid Inner Conductor

Structure:



Structure Details:

Cable Type	Dia.(mm)	Material
Inner Conductor	2.44	Silver plated Copper
Dielectric	6.50	Low Density PTFE
Inner Shield	6.90	Silver Plated Copper Strip
Outer Shield	7.65	Silver Plated Copper Braid
Jacket	8.30	FEP

Electrical Specifications:

Operating Freq.: 18 GHz

Cut-off Freq.: 18 GHz

Impedance: 50 Ω

Velocity of Propagation: 83%

Shielding Effectiveness: >90 dB

Dielectric Withstanding Voltage: 3000 V DC

Passive Intermodulation (PIM): -155 dBc

Phase Change vs Temperature: <750PPM@-55~+85 °C

Mechanical Specifications:

Static Bending Radius: 42 mm

Dynamic Bending Radius: 83 mm

Weight: 162 g/m

Environmental Specifications:

Temperature: -55~+165 °C

Typical Attenuation(dB/100m) and Power handling (W)

Freq.(GHz)	1	2	3	6	8	10	12.4	16	18
Attenuation ¹	13.3	18.9	23.4	33.6	39.1	44.1	49.5	56.9	60.6
Avg. Power ²	2433	1703	1380	960	824	731	651	567	532
K1: 0.408997, K2: 0.000320									

Typical value@+25 °C,VSWR=1.0;

2: Typical value@+40 °C,VSWR=1.0,Sea Level;

3: Typical Cable Attenuation Calculation Formula: $K1 \cdot \sqrt{F(\text{MHz})} + K2 \cdot F(\text{MHz})$;

4: Typical Connector Attenuation Calculation Formula: $0.03 \cdot \sqrt{F(\text{GHz})}$.

1:

Cable Assemblies Naming Rule:

PN: Cable-Max. Freq.-Conn.1-Conn.2-Length(m)

Eg.: FS830A-18-NM-NF-1 means FS830A cable, DC-18GHz, N (m)-N(f), 1m.

Add "R" for right-angle or "H" for bulkhead after the connector code (e.g., NMR, NFH).

Connectors Options	Frequency (Max)	VSWR (Max)	Body Material
SMA (S)	18GHz	1.30:1	Passivated Stainless Steel
N (N)	18GHz	1.25:1	
TNC (T)	18GHz	1.25:1	