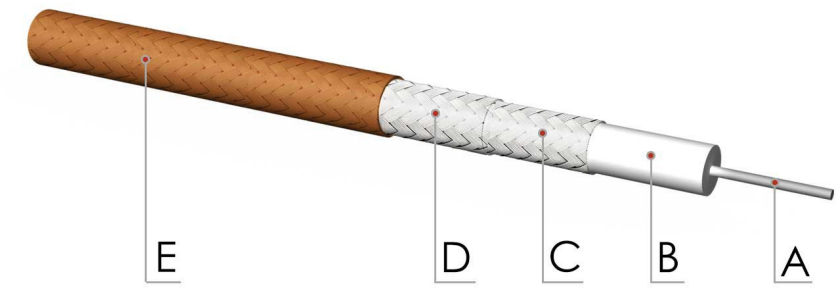
RG142B/U

Flexible PTFE High Power Coaxial Cable

DATASHEET



FEATURES:

- High power handling
- High temperature
- High chemical resistance
- MIL-C-17F Compliant

RoHS COMPLIANT CE

Construction

	ITEM	MATERIAL	DIAMETER	REMARK
A	Center Conductor	SCCS (Silver Plated Copper Covered Steel)	0.93 mm (0.037 in)	Solid Core
B	Dielectric	PTFE (Poly Tetra Flour Ethylene)	2.95 mm (0.116 in)	-
C	Outer Conductor	SPC (Silver Plated Copper)	3.50 mm (0.138 in)	95% Coverage 112x0.12 (Braid)
D	Outer Conductor	SPC (Silver Plated Copper)	4.00 mm (0.157 in)	95% Coverage 112x0.12 (Braid)
E	Jacket	FEP (Fluorinated Ethylene Propylene)	4.95 mm (0.195 in)	Light Brown

Electrical & Mechanical Data

Characteristic Impedance	50Ω (±2)
Operating Frequency	dc - 6 GHz
Velocity of Propagation	70%
Signal Delay	4.7 ns/m
Capacitance	95 pF/m
Operating Temperature	-55 / +200 °C (-67 / 392 °F)
Shield Effectiveness	> 80 dB
Working Voltage	1900 V_{RMS} (max.)
Withstanding Voltage	5000 V_{RMS} (max.)
Weight	63.5 Kg/Km
Min. Bending Radius	30 mm (single), 60 mm (multiple)

Attenuation & Power Handling

Frequency	Typical Attenuation		Average max Power
(MHz)	(dB/100m)	(dB/100ft)	(W)
10	4.0	1.2	3500
30	6.9	2.1	1950
50	9.0	2.7	1700
100	12.9	3.9	1300
150	16.0	4.9	1010
450	29.0	8.8	650
1000	45.8	14.0	410
2400	76.0	23.2	250
5500	125.0	38.1	170
6000	135.9	41.4	155