

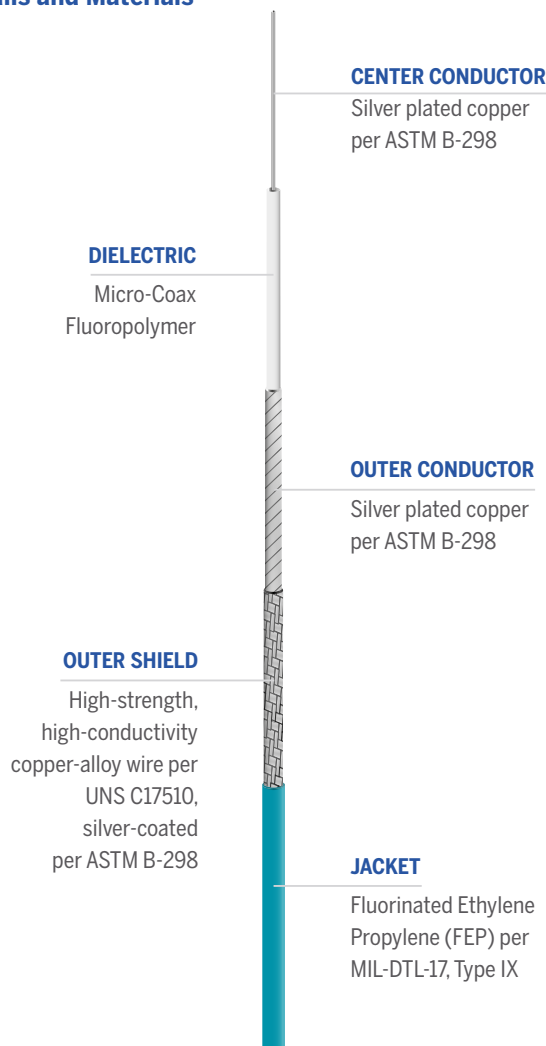
UFP142A

UTiFLEX®



UFP142A is the ideal coaxial solution for high-frequency applications in aerospace, defense, and advanced test systems. Its robust construction and reliable electrical performance make it perfect for use in radar systems, electronic warfare platforms, and space-constrained test environments. When design demands consistent performance under pressure, trust UTiFLEX® to deliver.

Details and Materials



 **Impedance**
50 Ohms

 **Operating Temperature**
-55°C to +125°C

 **RoHS**
Compliant

Mechanical/Physical Properties

Jacket Diameter	in	0.142
	mm	3.61
Weight	grams/ft	≤ 10.9
	grams/m	≤ 35.8
Min Static Bend Radius	in	0.625
	mm	15.88
Center Conductor Strands		1

Electrical Properties

Velocity of Propagation	(%)	81.5
RF Shielding	(dB) at 1 GHz	≥ 100
Capacitance	pF/ft	25.48
	pF/m	83.59
Maximum Frequency	GHz	40
Corona Extinction Voltage	VRMS @ 60Hz	360
Dielectric Withstanding Voltage	VRMS @ 60Hz	5000
Insertion Loss Stability	% Change ²	≤ 5
K1	Ft (m)	10.20 (0.335)
K2	Ft (m)	0.80 (0.026)

Maximum Attenuation¹ and VSWR⁴ (at 20°C and Sea Level)

Frequency	Attenuation		VSWR
GHz	dB/100ft	dB/m	
0.5	8	0.26	≤ 1.25:1
1	11	0.36	≤ 1.25:1
10	41	1.35	≤ 1.25:1
18	58	1.90	≤ 1.25:1
26.5	74	2.43	≤ 1.25:1
40	97	3.18	≤ 1.35:1

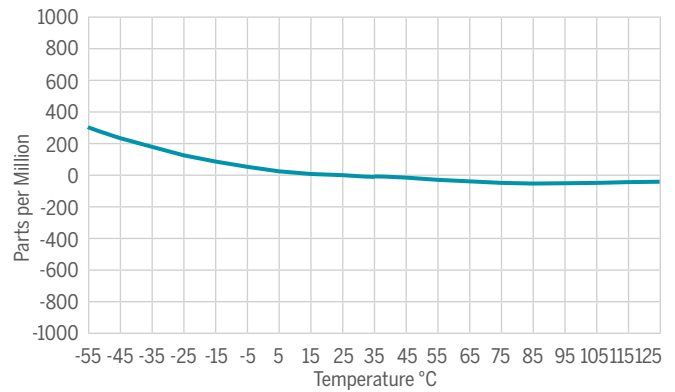
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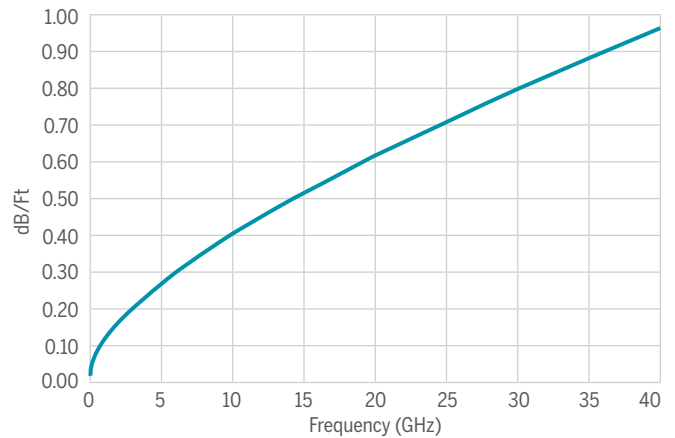
Environmental Properties

Thermal Shock	MIL-STD-202, Method 107, 20 Cycles, -55 to 125 °C (cable and SMA connectors only)
Stress Crack Resistance	MIL-DTL-17, Paragraph 4.8.17, except at 125 °C
Cold Bend Test	MIL-DTL-17, Paragraph 4.8.19

Typical Phase Change vs. Temperature



Maximum Insertion Loss



Notes

1. Maximum Attenuation (db./100Ft) = $K1\sqrt{F} + K2F$ where F is Frequency in GHz.
2. Insertion Loss change, while vibrated at a frequency of 6 Hz and an amplitude of 1 inch.
3. Reserved.
4. VSWR testing to be performed on 20-foot minimum lengths with gating used to remove connector contributions. Minimum frequency points shall be 1601.