

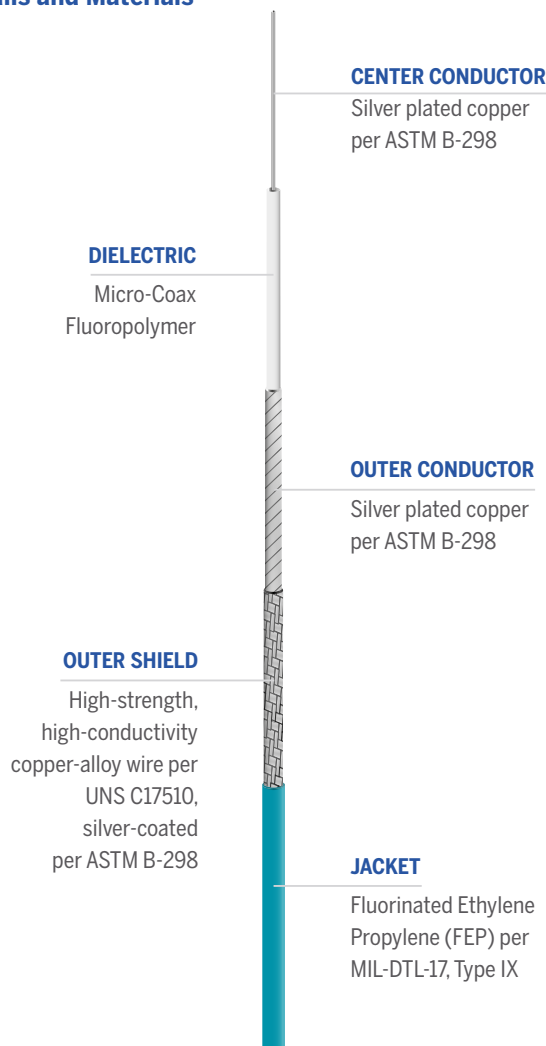
# UFP142A

## 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

Center Conductor Diameter	in	0.0403
	mm	1.502
Dielectric Diameter	in	0.110
	mm	2.79
Outer Conductor Diameter	in	0.118
	mm	3.00
Outer Shield Diameter	in	0.132
	mm	3.35
Jacket Diameter	in	0.142
	mm	3.61
Jacket Wall Thickness	in	≥ 0.003
	mm	≥ 0.076
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 <sup>2</sup>	≤ 5
K1	Ft (m)	10.20 (0.335)
K2	Ft (m)	0.80 (0.026)

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UTiFLEX®

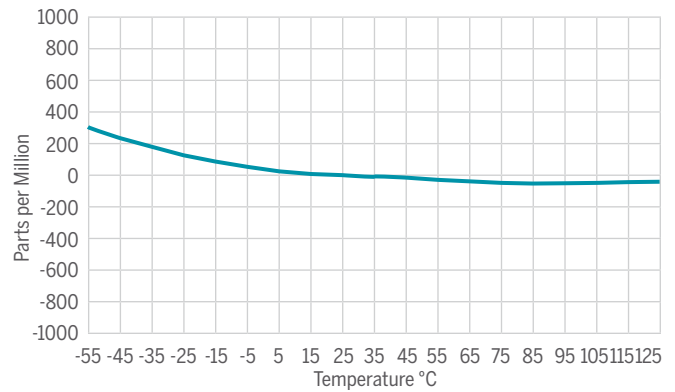
## Maximum Attenuation<sup>1</sup> and VSWR<sup>4</sup> (at 20°C and Sea Level)

Frequency GHz	Attenuation dB/100ft	dB/m	VSWR
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

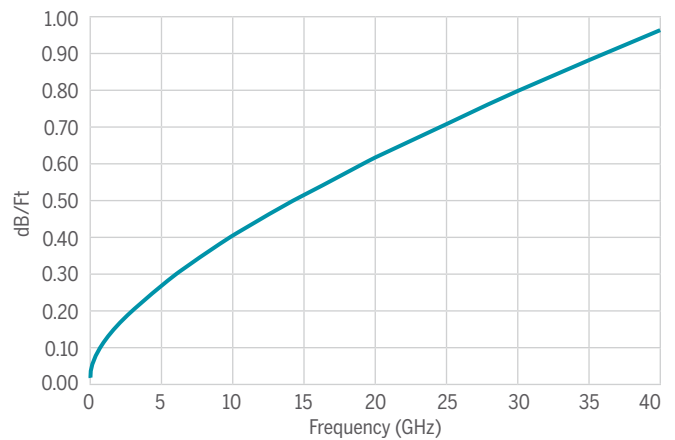
## Environmental Properties

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) = K1vF + 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.