

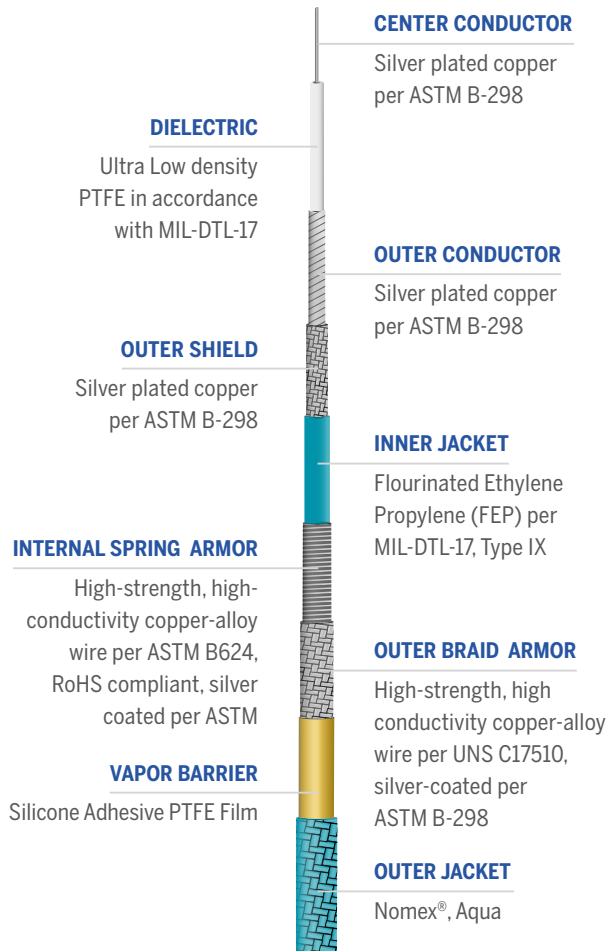
# AccuPhase<sup>®</sup> 26.5

## UKR300C



AccuPhase26.5 test cable assemblies represent the best in microwave cable technology. We fit AccuPhase26.5 with an additional highly flexible and abrasion-resistant ruggedization. Ideal choice for test labs or any testing environment requiring excellent mechanical strength and long-term reliability in a compact package. Our product has passed strenuous lifetime qualification testing to ensure long-term reliability. Also features excellent crush, torque, and kink resistance. Available with a variety of connectors capable of operating up to 26.5-GHz, ideally suited to the demanding requirements of today's test environments.

### Details and Materials



 **Impedance**  
50 Ohms
  **Operating Temperature**  
-65°C to +165°C
  **RoHS Compliant**

### Mechanical/Physical Properties

Jacket Diameter	in	0.300
	mm	7.62
Weight	grams/ft	≤ 51
	grams/m	≤ 167.3
Min Static Bend Radius	in	1.5
	mm	38.1
Crush Resistance	lbs/in	≥ 250
Flex-Life-Snake <sup>3</sup>	cycles	200,000
Center Conductor Strands		7

### Electrical Properties

Velocity of Propagation	(%)	81.5
RF Shielding (1-18 GHz with connectors shielded)	dB	≥ 90
Capacitance	pF/ft	26.9
	pF/m	88.2
Cutoff Frequency	GHz	26.5
Corona Extinction Voltage	VRMS @ 60Hz	3500
Dielectric Withstanding Voltage	VRMS @ 60Hz	5000
Insertion Loss Stability	% Change <sup>2</sup>	≤ 5
K1	Ft (m)	8.02 (0.263)
K2	Ft (m)	0.11 (0.004)

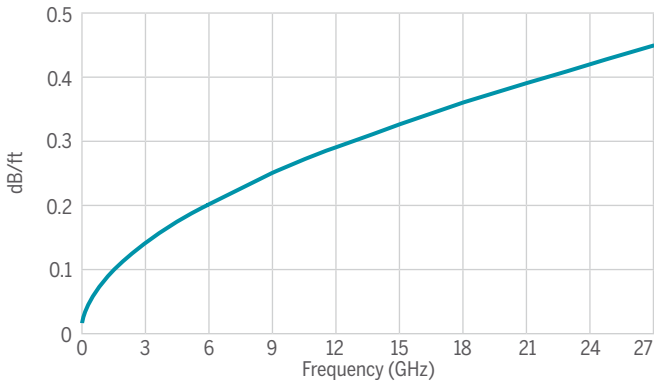
### Maximum Attenuation<sup>1</sup> and Power (at 20°C and Sea Level)

Frequency GHz	Attenuation		Power Watts (CW)
	dB/100ft	dB/m	
0.5	6	0.19	1357
1	8	0.17	957
5	19	0.61	422
10	27	0.87	296
18	36	1.18	218
26.5	44	1.45	178

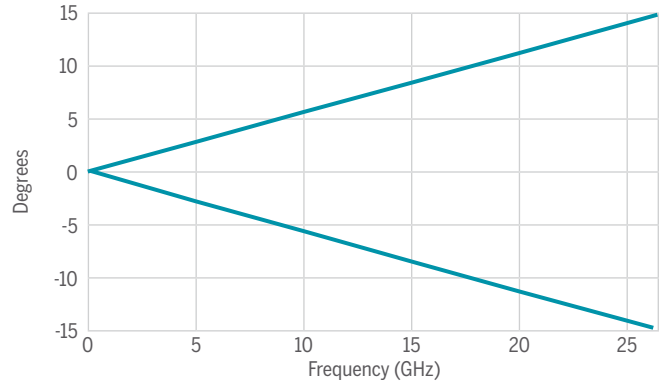
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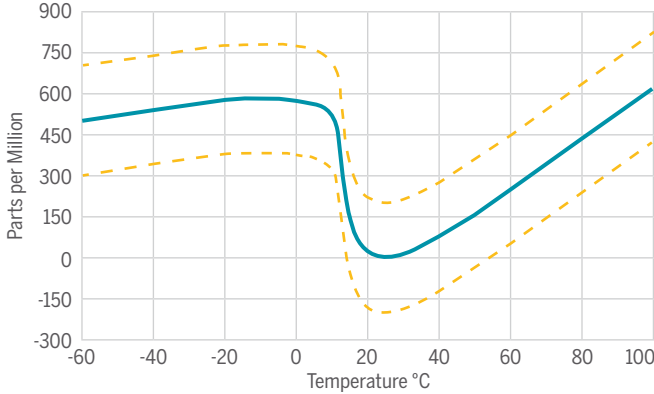
### Maximum Attenuation



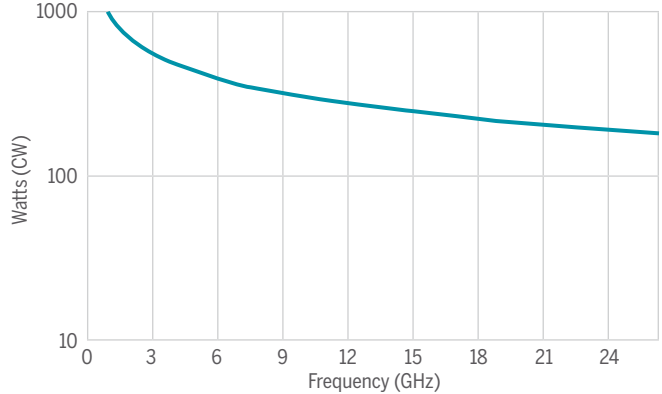
### Typical Phase Change vs. Bending<sup>4</sup>



### Typical Phase Change vs. Temperature



### Maximum Power Handling



### Connectors

Description	Part Number	Rated Frequency (GHz)	Max VSWR* (per connector)
Precision 3.5mm Plug	000	26.5	1.20:1
Precision 3.5mm Jack	010	26.5	1.20:1
HF SMA Plug	300	26.5	1.20:1
HF SMA Jack	310	22	1.22:1
Precision N Plug	50U	18	1.16:1
Precision N Jack	510	18	1.16:1
Precision TNC Plug	60U	18	1.20:1
Precision TNC Jack	610	18	1.20:1
N Plug	70U	12.4	1.16:1
N Jack	710	12.4	1.16:1

### Notes

- Maximum Attenuation (db./100Ft) =  $K1\sqrt{F} + K2F$  where F is the Frequency in GHz.
- Insertion Loss change, while vibrated at a frequency of 6 Hz and an amplitude of 1 inch.
- Connect both ends of cable to flex (snake) machine. The movement of the flex machine arm from 36 to 18 inches, stopping, and then returning to 36 inches shall be 1 flex cycle.
- Typical phase change vs bending for cable wrapped 360° around a 4.5 in diameter mandrel.
- Assembly insertion loss can be calculated by adding the attenuation for the length of cable and the insertion loss contribution of the 2 connectors.
- Test Plots required with Shipment (Attenuation and VSWR).
- The values in this document are not guaranteed and may change without prior notice.

\* Max VSWR for the complete cable assembly = Max VSWR(con1) \* Max VSWR (con2)