

# INSTABEND™ 047

## HIGH PERFORMANCE MICROWAVE ASSEMBLIES

**INSTABEND™** are flexible, coaxial microwave assemblies designed for interconnects between RF circuit cards, modules and enclosure panels. The cable can be bent very closely behind the connector, simplifying cable routing.

### FEATURES

- Readily Available
- Extreme bending from the back of the connector for minimal footprint

### Cable Specifications

	Units	
Diameter	in (mm)	0.061 (1.55)
Weight	lb/ft (kg/m)	0.005 (0.007)
Minimum Bend Radius	in(mm)	0.13 (3.30)
Operating Temperature	°F	-85 to 257
	°C	-65 to 125
Maximum Frequency	GHz	110
Maximum Operating Voltage	VACrms	100
Impedance	ohms	50
Velocity of Propagation	%	70
Capacitance	pF/ft (pF/m)	29.9 (98.1)
Delay	ns/ft (ns/m)	1.45 (4.76)
Shielding	dBc	-90



- 1 Center Conductor**  
Silver Plated Copper Clad Steel
- 2 Dielectric**  
PTFE
- 3 Shield**  
Silver Plated Copper Clad Steel
- 4 Outer Braid**  
Silver Plated Copper Clad Steel
- 5 Jacket**  
Blue FEP

$$IL = (K1 \times \sqrt{f} + K2 \times f) \times \text{Cable Length} + \text{Connector Loss}$$

Cable Insertion Loss

Length unit must match K value unit.

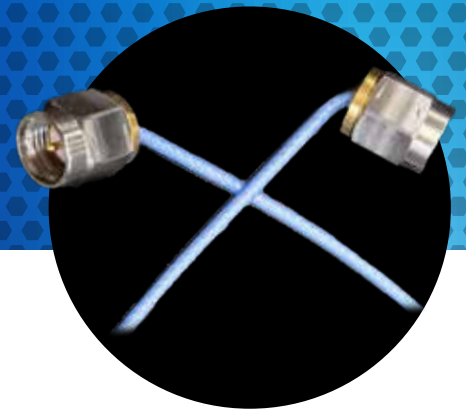
K Values		
	dB/ft	dB/m
K1	0.011950	0.0392
K2	0.00001280	0.0000420
f= Frequency in MHz		

#### Loss Per Pair

Frequency MHz	dB/pr
500	0.04
1000	0.06
2000	0.08
4000	0.12
6000	0.15
8000	0.17
10000	0.19
12000	0.21
14000	0.22
16000	0.24
18000	0.25

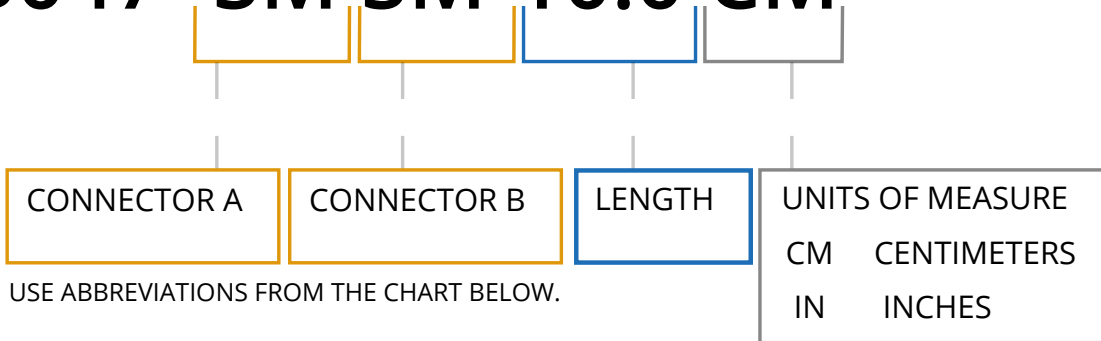
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HIGH PERFORMANCE MICROWAVE COAXIAL CABLE



## Ordering Guide

# IB047- SM SM-10.0 CM



Abbreviation	Part Number	Description	VSWR max
SMPF	47432	SMP female Straight	1.35 @ DC-12.4 GHz 1.50 @ 12.4- 18 GHz
SM	47396	SMA male Straight	1.25 @ DC-27 GHz
KM	47425	2.92 male Straight	1.25 @ DC-27 GHz 1.40 @ 27- 40 GHz



Heritage—in the air and on the ground, thousands of assemblies built over decades



Global manufacturing capability: US, and Asia.



Assembled and tested assemblies provide assured performance

### WORLD HEADQUARTERS

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