

# INSTABEND™ 086

## 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)	0.10 (2.67)
Weight	lb/ft (kg/m )	0.01 (0.02)
Minimum Bend Radius	in(mm)	0.3 (6.4)
Operating Temperature	F°	-76 to 257
	C°	-60 to 125
Maximum Frequency	GHz	62
Maximum Operating Voltage	VAC <sub>rms</sub>	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

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

### Cable Insertion Loss

#### K Values

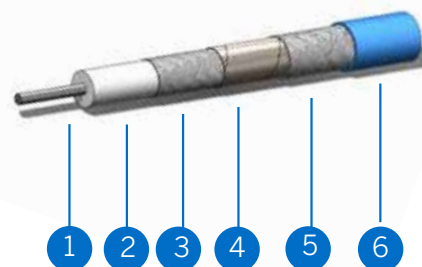
	dB/ft	dB/m
K1	0.00666	0.0218
K2	0.00001279	0.0000419

f= Frequency in MHz

Length unit must match K value unit.

#### Loss Per Pair

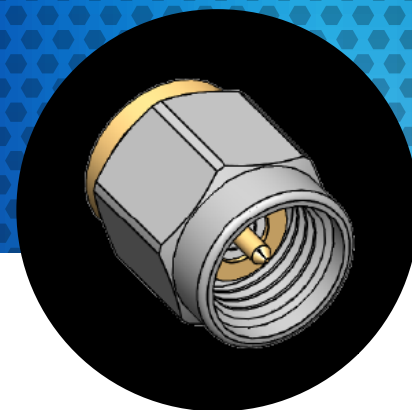
Frequency MHz	dB/pr
500	0.04
1000	0.06
2000	0.08
4000	0.12
6000	0.15
8000	0.17
10000	0.19
12000	0.21
14000	0.22
16000	0.24
18000	0.25



- Center Conductor**  
Silver Plated Copper Clad Steel
- Dielectric**  
PTFE
- Shield**  
Silver Plated Copper Braid
- Interlayer**  
Metalized Polyester Tape
- Outer Braid**  
Silver Plated Copper Clad Steel
- Jacket**  
Blue FEP

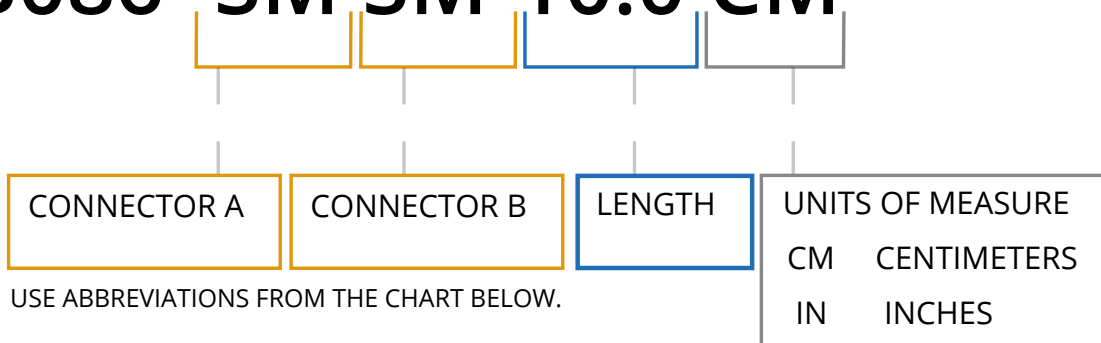
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HIGH PERFORMANCE MICROWAVE COAXIAL CABLE



## Ordering Guide

# IB086- SM SM-10.0 CM



Abbreviation	Part Number	Description	VSWR max
SMPF	47389	SMP female Straight	1.35 @ DC-12.4 GHz 1.50 @ 12.4- 18 GHz
SM	47388	SMA male Straight	1.25 @ DC-27 GHz
KM	47393	2.92 male Straight	1.25 @ DC-27 GHz 1.40 @ 27-40 GHz



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