

InstaBend® 086

High Performance Microwave Assemblies

InstaBend®086 are flexible coaxial microwave assemblies designed for interconnects between RF circuit cards, modules, and enclosure panels. This cable is an optimal compromise between flexure, loss, and power handling.

Features

- Readily available
- Extreme bending from the back of the connector for minimal footprint
- 90° torque resistance
- Highly stable VSWR
- Ruggedized backend

Specifications

Ω Impedance
50 Ohms

Op Temp
-85 to +257°F
-65 to +125°C

Units

Diameter	in (mm)	0.105 (2.67)
Weight	lb/ft (g/m)	0.013 (19.3)
Minimum Bend Radius	in (mm)	0.25 (6.35)
Maximum Frequency	GHz	50
Maximum Operating Voltage	VACrms	100
Velocity of Propagation	%	70
Capacitance	pF/ft (pF/m)	29 (95.1)
Delay	ns/ft (ns/m)	1.45 (4.76)
Shielding	dB	>90

Calculation

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

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit



K values

dB/ft

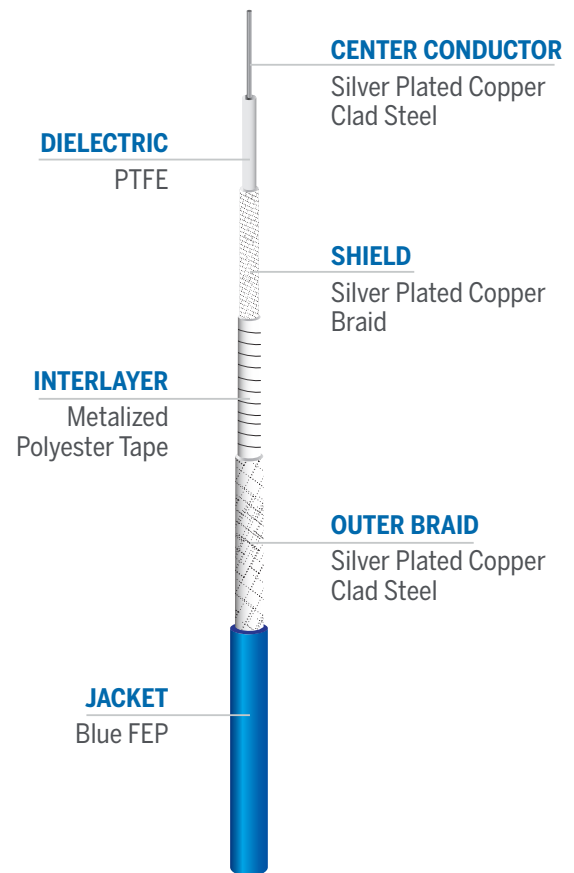
dB/m

K1	0.006446	0.021148
K2	0.000013	0.000043

Frequency
(MHz)

dB/pr

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



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Connectors

	Code	Part-Number	Stock Code	Description	VSWR max
	KM	IB-086-KM	47393	2.92 mm, male, straight	1.25 @ DC-27 GHz 1.40 @ 27-40 GHz
	SM	IB-086-SM	47388	SMA, male, straight	1.25 @ DC-27 GHz
	SMPF	IB-086-SMPF	47389	SMP, female, straight	1.35 @ DC-12.4 GHz 1.50 @ 12.4- 18 GHz 1.70 @ 18- 40 GHz

Ordering Guide

IB086

Cable
Code

-XXX

Connector A
Code

XXX-

Connector B
Code

XX.X

Length

X

Units of measure:

I = Inches, F = Feet, CM= centimeters, M = Meters



Global manufacturing capability:
US, Asia, and India.



Assembled and tested assemblies
provide assured performance.

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