

InstaBend® 141

High Performance Microwave Assemblies



InstaBend® are flexible, coaxial microwave assemblies designed for interconnects between RF circuit cards, modules and enclosure panels. The cable has the ability to bend behind the connector, simplifying cable routing.

Features:

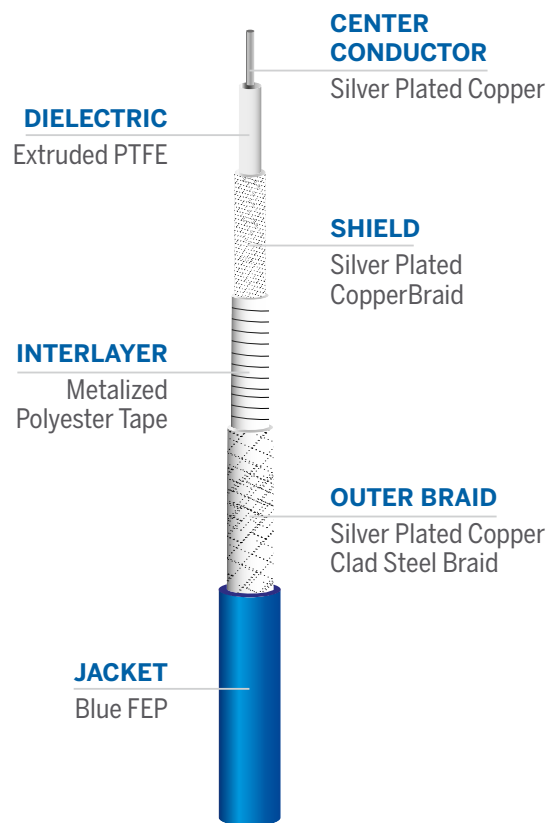
- Readily available
- Low-profile bending for minimal footprint
- Weight savings vs. semi-rigid
- Highly ruggedized

Specifications

Ω Impedance
50 Ohms
Units

Op Temp
-85 to 257°F
-65 to 125°C

Diameter	in (mm)	0.163 (4.14)
Weight	lb/ft (g/m)	0.028 (41.7)
Minimum Bend Radius	in (mm)	0.5 (12.7)
Maximum Frequency	GHz	27
Maximum Operating Voltage	VACrms	250
Velocity of Propagation	%	70
Capacitance	pF/ft (pF/m)	29.3 (98.1)
Delay	ns/ft (ns/m)	1.45 (4.77)
Shielding	dB	-90



Calculation

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

Cable Insertion Loss
f = Frequency (MHz)

Use **K** values with
matching length unit

K values	dB/ft	dB/m
K1	0.003626	0.011897
K2	0.000013	0.000043

Typical Connector Loss

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

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Ordering Guide

IB141 **-XX** **XX-** **XX.X** **XX**
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 - Connector A Connector B - Length in / ft / cm / m

CODE	Part Number	Description	VSWR max
SM	47404	SMA Male Straight	1.2 @ DC - 12 GHz 1.3 @ 12 - 27 GHz



Global manufacturing capability: US, and Asia.



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



Assembled and tested assemblies provide assured performance.

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