

Commercial Space Line

InstaBend® PhaseStable 092



InstaBend® PhaseStable 092 is an Ultra-Flexible phase-stable coax assembly featuring a proprietary fluorocarbon dielectric, TF4®, eliminating the PTFE change phase occurring around 19 °C. PhaseTrack assemblies have the same triple-shield construction used in our popular SF®, SFT®, SilverLine®, and MilTtech® cables and are ideal for applications demanding stable phase over temperature.

Features:

- Phase stable performance over temperature
- Sold as cable assemblies
- Low outgassing materials per ASTM E595
- Class 100,000 clean room manufacturing
- Vented connectors, if applicable
- Radiation Resistance: 100 MRads

Specifications

 Impedance
50 Ohms

 Op Temp
-65 to 150°C

Units

Diameter	in (mm)	0.103 (2.61)
Weight	lb/ft (g/m)	0.0113 (17)
Minimum Bend Radius	in (mm)	0.5 (12.7)
Maximum Frequency	GHz	40
Velocity of Propagation	%	79.5
Capacitance	pF/ft (pF/m)	25.4
Delay	ns/ft (ns/m)	1.24 (4.07)
Shielding	dB	-90

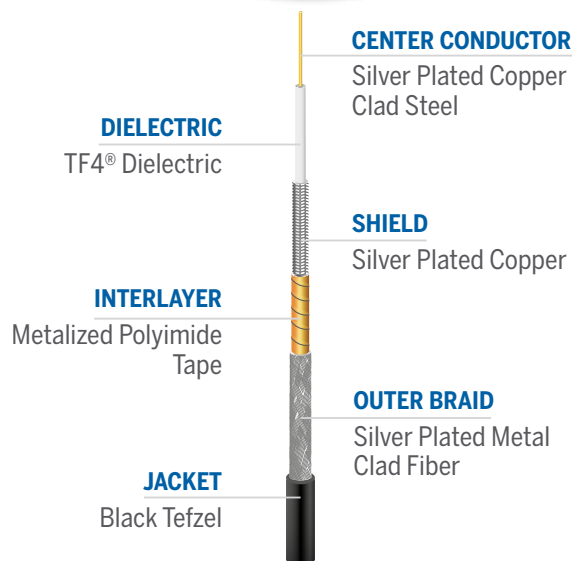
Calculation

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

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

K values	dB/ft	dB/m
K1	0.006575	0.021573
K2	0.000009607	0.000031521

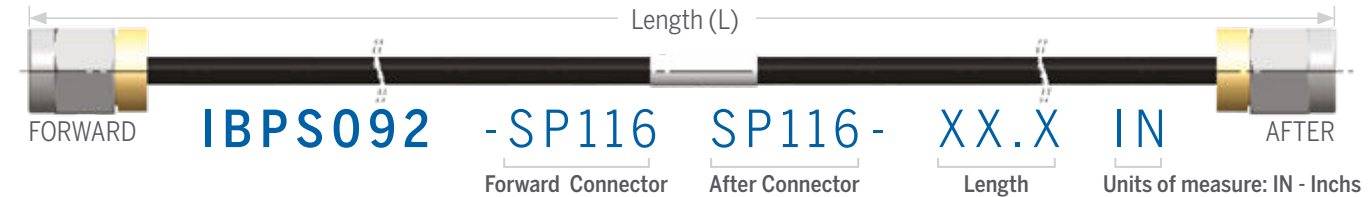


Insertion loss & VSWR

Stock Code	Max. Insertion Loss in dB @ 40GHz	Max. VSWR @ 40GHz
IE-00416-01	1.06	1.35
IE-00416-02	1.29	1.35
IE-00416-03	1.53	1.35
IE-00416-04	1.76	1.35
	Max. Insertion Loss in dB @ 27GHz	Max. VSWR @ 27GHz
IE-00417-01	0.83	1.50
IE-00417-02	1.06	1.50
IE-00417-03	1.29	1.50
IE-00417-04	1.53	1.50
IE-00417-05	1.76	1.50
	Max. Insertion Loss in dB @ 27GHz	Max. VSWR @ 27GHz
IE-00418-01	1.06	1.35
IE-00418-02	1.29	1.35
IE-00418-03	1.53	1.35
IE-00418-04	1.76	1.35

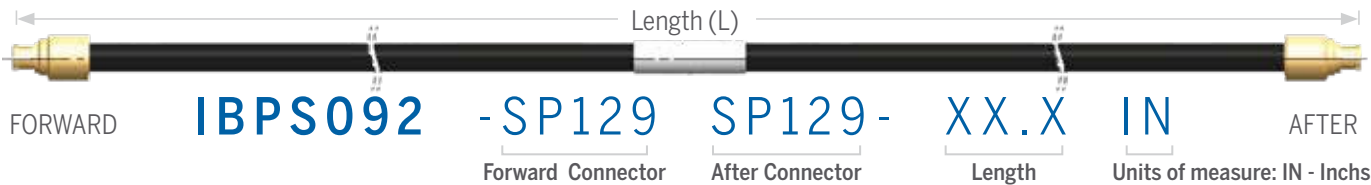
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Ordering Guide



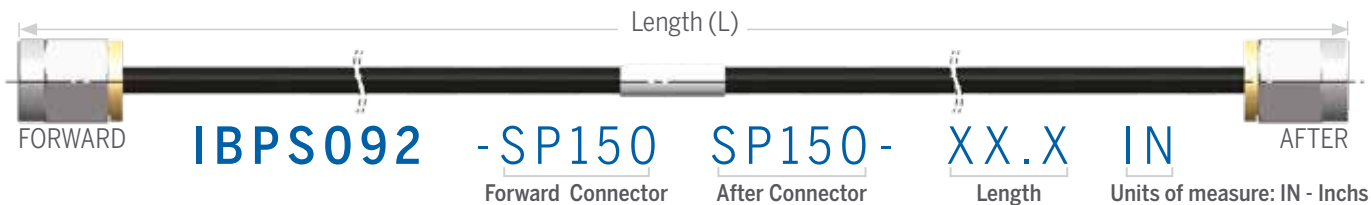
Stock Code	Part-Number	Length (L) in inch
IE-00416-01	IBPS092-KMKM-6.0IN	6
IE-00416-02	IBPS092-KMKM-8.0IN	8
IE-00416-03	IBPS092-KMKM-10.0IN	12
IE-00416-04	IBPS092-KMKM-12.0IN	10

Connector Code	Description	Connector Body	Center Contact	Connector Loss (per pair)
SP116	Type K (M) Straight	Stainless Steel, Gold Plated	Beryllium Copper, Gold Plated	0.06 x v(f) (GHz)



Stock Code	Part-Number	Length (L) in inch
IE-00417-01	IBPS092-MSMPFMSMPF-4.0IN	4
IE-00417-02	IBPS092-MSMPFMSMPF-6.0IN	6
IE-00417-03	IBPS092-MSMPFMSMPF-8.0IN	8
IE-00417-04	IBPS092-MSMPFMSMPF-10.0IN	10
IE-00417-05	IBPS092-MSMPFMSMPF-12.0IN	12

Connector Code	Description	Connector Body	Center Contact	Connector Loss (per pair)
SP129	Type Mini SMP (F) Straight	Stainless Steel, Gold Plated	Beryllium Copper, Gold Plated	0.06 x v(f) (GHz)



Stock Code	Part-Number	Length (L) in inch
IE-00418-01	IBPS092-SMSM-6.0IN	6
IE-00418-02	IBPS092-SMSM-8.0IN	8
IE-00418-03	IBPS092-SMSM-10.0IN	10
IE-00418-04	IBPS092-SMSM-10.0IN	12

Connector Code	Description	Connector Body	Center Contact	Connector Loss (per pair)
SP150	Type SMA (M) Straight	Stainless Steel, Gold Plated	Beryllium Copper, Gold Plated	0.06 x v(f) (GHz)

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