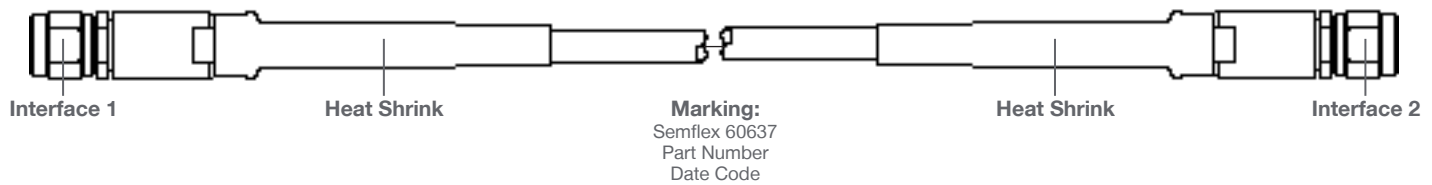


HPI Series Cable Assemblies

With LA Type Cable



Specifications

	Frequency GHz, max.	Insertion Loss SMA-SMA, 1ft. @ 18 GHz, dB, max.	Shielding dB@ 18 GHz, min.	Cable Diameter in., nominal	Inside Bend Radius in., min.	Operating Temperature °C, nominal
LA190S	28	0.47	100	0.189	1.1	-65 to +165
LA290S	18	0.63	100	0.292	1.6	-65 to +165

Insertion Loss Calculator

Cable Insertion Loss, dB/ in. @ Freq (GHz) =
 $IL = \text{Cable Loss} + \text{Connector Loss} + \text{Connector Loss}$

Cable Loss, dB/ in. @ Freq (GHz) =
 $L \times [(k1 \times \sqrt{F}) + (k2 \times F)] / 1200$

Connector Loss, dB @ Freq (GHz) =
 $k3 \times \sqrt{F}$

IL = Insertion Loss (dB)
 L = Length (in.)
 F = Frequency (GHz)

Cable Constants	LA190S	LA290S
Max., Freq. GHz	28	18
k1	7.38	4.24
k2	0.32	0.19

Connector Constants, k3	Straight	Right Angle
2.92mm, SMA	0.03	0.05
N, TNC	0.05	0.07

VSWR Guide		
Freq. GHz	Interface	VSWR* (max.)
28	2.92mm Straight	1.30
26	SMA Straight	1.30
26	SMA Right Angle	1.35
18	N Straight	1.35
18	N Right Angle	1.40
18	TNC Straight	1.35
18	TNC Straight	1.40

*Contact factory for detailed VSWR specifications

Ordering Instructions

HPI Series Assembly Cable Type **LA290S Cable, FEP Jacket** Interface Type **Straight SMA Male to Straight SMA Male,** Length (in.) **12 in. Long**

Part Number:

Interface Type 1	Cable Type		Interface Type 2	Length (in.)
S1	L29	BF	S1	0012

Interface 1
 ↓
 Connector Selection Order
 ↓
 Interface 2

Interface Type		Cable Type	
		L19 LA190S	L29 LA290S
X1	2.92mm Male Straight	Y	-
S1	SMA Male Straight	Y	Y
S2	SMA Male Right Angle	-	Y
S4	SMA Female Bulkhead	-	Y
N1	N Male Straight	-	Y
N2	N Male Right Angle	-	Y
N4	N Female Bulkhead	-	Y
T1	TNC Male Straight	-	Y
T2	TNC Male Right Angle	-	Y
T4	TNC Female Bulkhead	-	Y

Length	
Min. 6 in. Example: 0006=6 in.; 0120=120 in. See Assemblies Lengths Definition	
Standard Length Tolerance	
6"~120"	-0", +0.5"
120"~180"	-0", +1"
180"~480"	-0", +4"

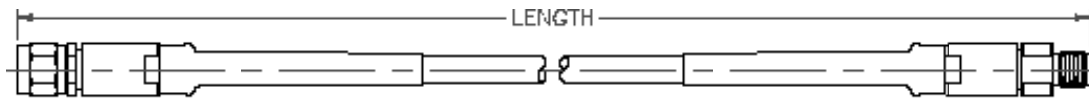


HPI Series Cable Assemblies

With LA Type Cable

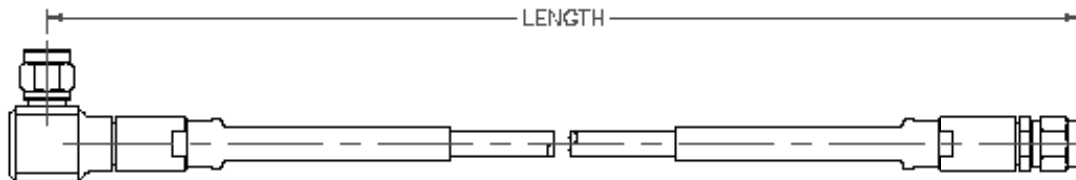


HPI Series Assemblies Construction and Lengths Definitions



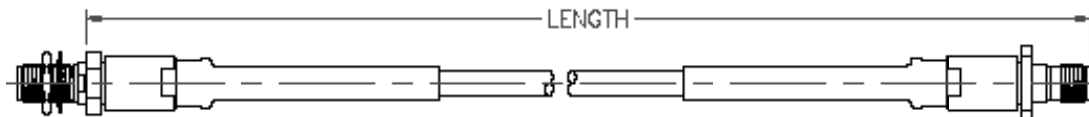
Straight Male/Female

Straight Male/Female



Right Angle/Swept Male

Straight Male/Female

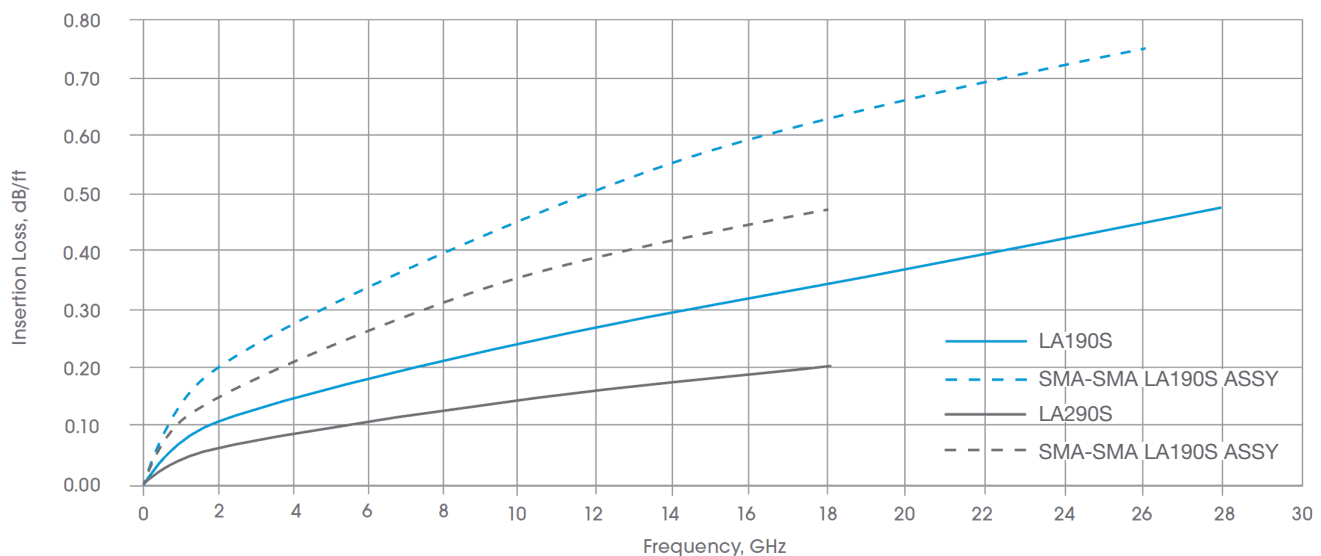


Female Bulkhead

Female Flange

Typical Insertion Loss Performance of LA Cables and Assemblies

LA Cables and SMA-SMA Cable Assemblies Insertion Loss, dB/ft



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