

Phase-Stable Flex Cable **CBN-XX-SMSM+**

50Ω DC to 26.5 GHz 1 to 5 Feet SMA-Male to SMA-Male

KEY FEATURES

- Exceptional phase stability ± 6 deg, max¹
- Exceptional amplitude stability ± 0.08 dB, max¹
- Shielding effectiveness of 90 dB
- Highly flexible, minimum bend radius of 50 mm
- Velocity of propagation, 74%



Generic photo used for illustration purposes only

APPLICATIONS

- Test & measurement
- High-speed data systems
- Instrumentation
- Precision measurement
- High-volume production test
- R&D and breadboard testing

PRODUCT OVERVIEW

The CBN-XX-SMSM+ cable family is ideal for interconnecting coaxial components and subassemblies in a wide range of systems, including test and measurement, instrumentation, and more. This flexible cable provides excellent phase and amplitude stability as well as flexibility. These cables are presently available from 1 to 5 feet long; for custom lengths, please contact the Mini-Circuits sales department.

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (GHz)	Length (ft)	Min.	Typ.	Max.	Units
Frequency Range	-	-	DC	-	26.5	GHz
Insertion Loss ²	DC - 26.5	1	-	0.8	1.4	dB
		3	-	2.1	3.0	
		5	-	3.5	4.7	
Return Loss ³ [VSWR]	DC - 26.5	1	17.7	35.5 [1.04]	[1.30]	dB [:1]
		3	17.7	31.3 [1.06]	[1.30]	
		5	17.7	31.8 [1.06]	[1.30]	

1. Phase & Amplitude stability specs guaranteed from 18 inches to 5 foot cable lengths. For cables shorted than 18 inches no degradation in performance is expected.

2. Measured at 26.5 GHz.

3. Measured as average across band.

ABSOLUTE MAXIMUM RATINGS⁴

Operating Temperature ⁵	-40°C to +85°C
Storage Temperature	-40°C to +85°C

4. Permanent damage may occur if any of these limits are exceeded.

5. Maximum ratings are not intended for continuous normal operation.



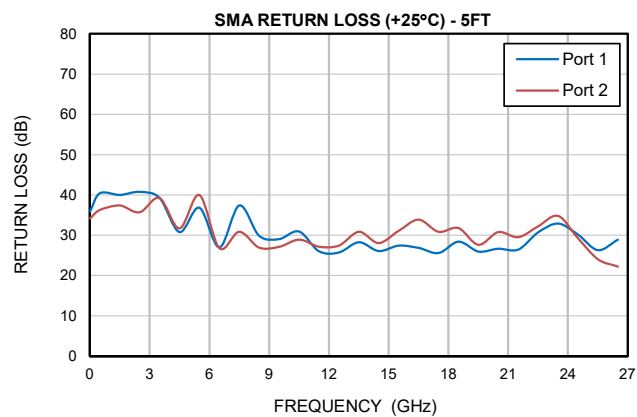
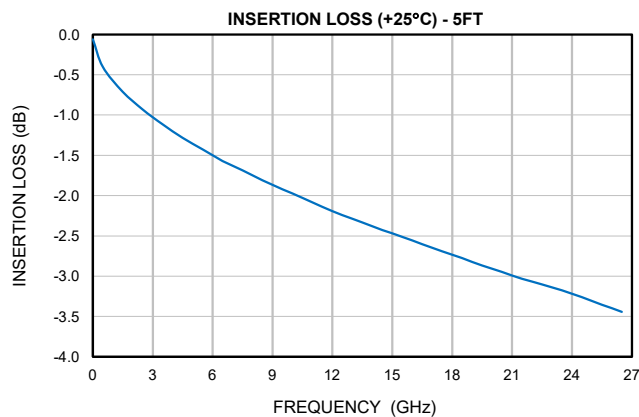
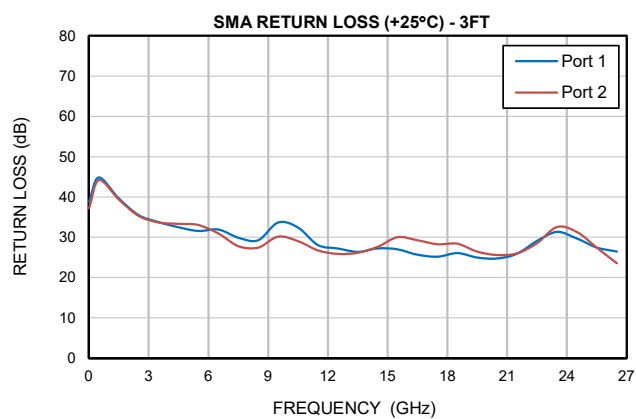
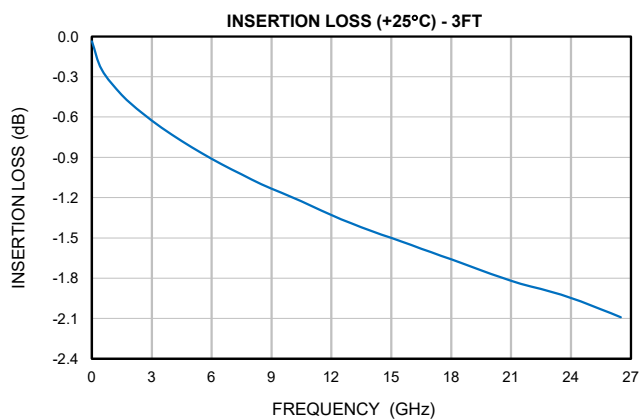
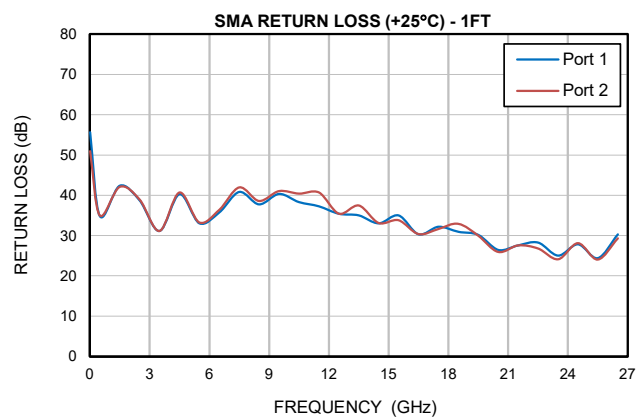
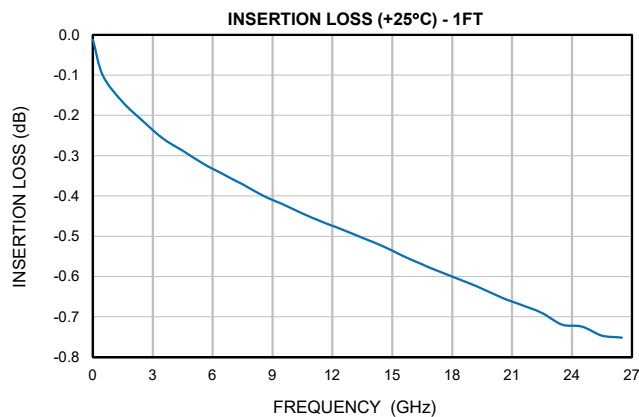
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TYPICAL PERFORMANCE GRAPHS





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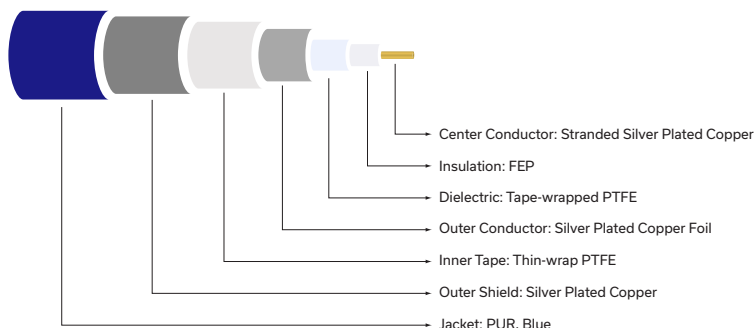
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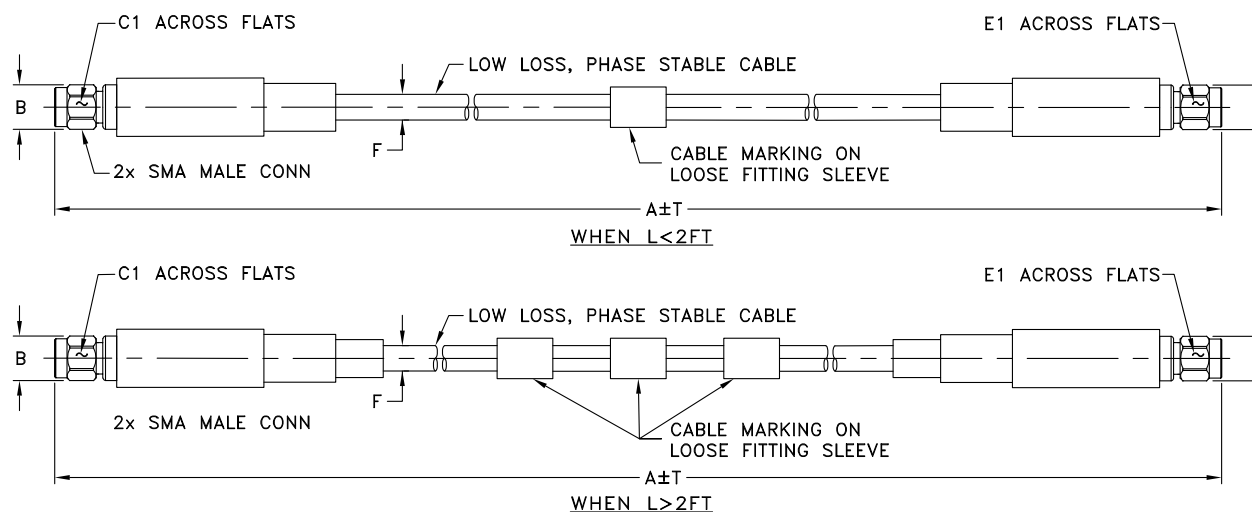
COAXIAL CONNECTIONS

Description	Connector 1	Connector 2
Connector Type	SMA Male	SMA Male
Orientation	Straight	Straight

CABLE CONSTRUCTION



CASE STYLE DRAWING



Unless Otherwise Specified dimensions are in inches [mm], Tolerances: 2 PL ±0.03; 3 PL ±0.015 inches

A		B	C1	D	E1	F	T		Wt. grams
Feet	Meters						Feet	Meters	
1.0	0.30	.36 (9.14)	.315 (8.00)	.36 (9.14)	.315 (8.00)	.205 (5.20)	+.04/-0	+.01/-0	32.0
3.0	0.91						+.06/-0	+.02/-0	63.5
5.0	1.52						+.10/-0	+.03/-0	94.0

PRODUCT MARKING*: CBN-XX-SMSM+

*Marking may contain other features or characters for internal lot control.





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ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

[CLICK HERE](#)

Performance Data & Graphs	Data
	Graphs
	S-Parameter (S2P Files) Data Set (.zip file)
Case Style	GM3711
RoHS Status	Compliant
Environmental Ratings	ENV149

NOTES

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html

