



Mini-Circuits

HAND
FLEX™

Coaxial Cable

FL086-12SMMCR+

50Ω DC to 6000 MHz 12 Inches SMA Male to Right-Angle MCX Male

KEY FEATURES

- Low loss, 0.7 dB typ. at 6000 MHz
- Excellent return loss, 27 dB typ. at 6000 MHz
- Hand formable to almost any custom shape without special bending tools
- 6 mm bend radius for tight installations
- Insulated outer jacket standard

*Generic photo used for illustration purposes only*

APPLICATIONS

- Replacement for custom bent 0.086" semi-rigid cables
- Communication Receivers and Transmitters
- Radar, EW and ECM Defense Systems
- Environmental and Test Chambers

PRODUCT OVERVIEW

FL086-12SMMCR+ Hand-Flex™ coaxial cable is a semi-flexible cable ideal for interconnecting coaxial components and sub-assemblies in a wide range of systems, including communications, military and aerospace, environmental test chambers and more. The hand-formable cable provides a minimum bend radius of 6 mm to accommodate tight layouts without the need for bending tools, adapters or brackets. SMA-Male and Right-Angle MCX-Male connectors makes this cable ideal for assemblies with SMA or MCX connector types.

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		6000	MHz
Length			12		Inches
Insertion Loss	10 - 2000	-	0.30	0.60	dB
	2001 - 4000	-	0.53	0.97	
	4001 - 6000	-	0.66	0.97	
Return Loss	10 - 2000	17.7	36.1	-	dB
	2001 - 4000	17.7	25.6	-	
	4001 - 6000	17.7	27.4	-	

ABSOLUTE MAXIMUM RATINGS¹

Operating Temperature	-45°C to +85°C
Storage Temperature	-45°C to +85°C
Power Handling at +25°C, Sea Level	95 W at 1 GHz

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

REV. B
ECO-025779
FL086-12SMMCR+
MCL NY
250616





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FLEX™

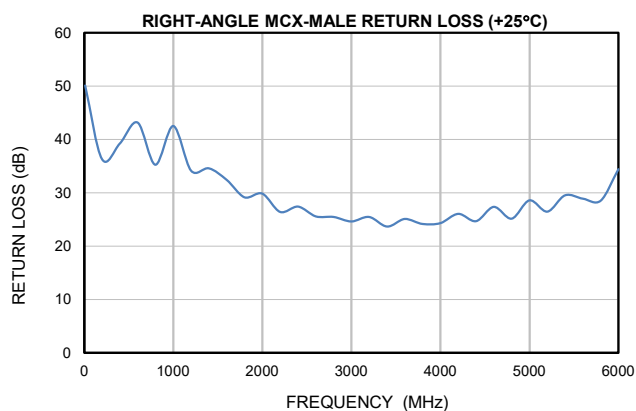
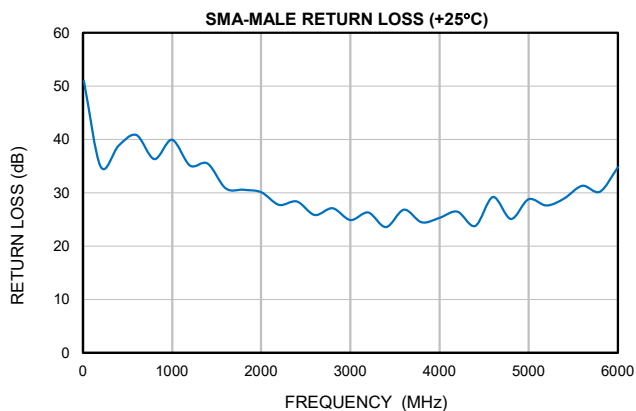
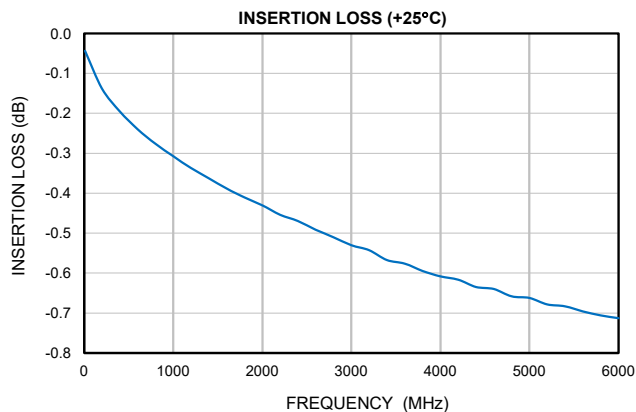
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TYPICAL PERFORMANCE GRAPHS





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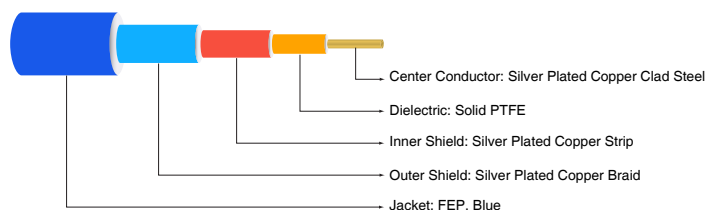
FL086-12SMMCR+

50Ω DC to 6000 MHz 12 Inches SMA Male to Right-Angle MCX Male

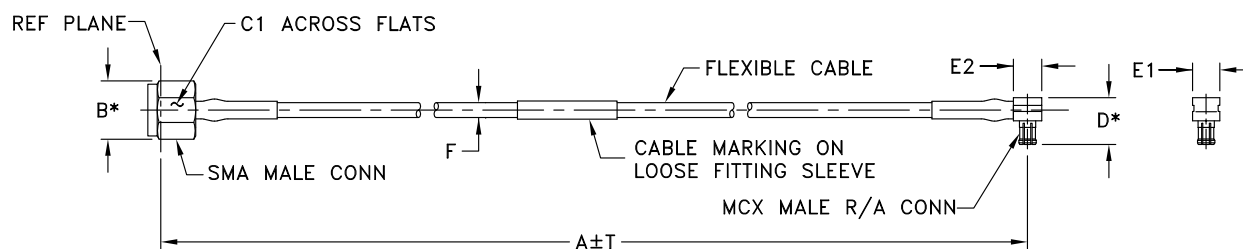
COAXIAL CONNECTIONS

Description	Connector 1	Connector 2
Connector Type	SMA-Male	MCX-Male
Orientation	Straight	Right-Angle

CABLE CONSTRUCTION



CASE STYLE DRAWING



OUTLINE DIMENSIONS (Inch mm)

A	B	C1	C2	D	E1	E2	T	wt
12.0	.36	.315	--	.338	.197	.22	0.10	grams
304.80	9.14	8.00	--	8.6	5.00	5.6	2.54	10.2

PRODUCT MARKING*: FL086-12SMMCR+

*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	SE3526-12
RoHS Status	Compliant
Environmental Ratings	ENV52T2

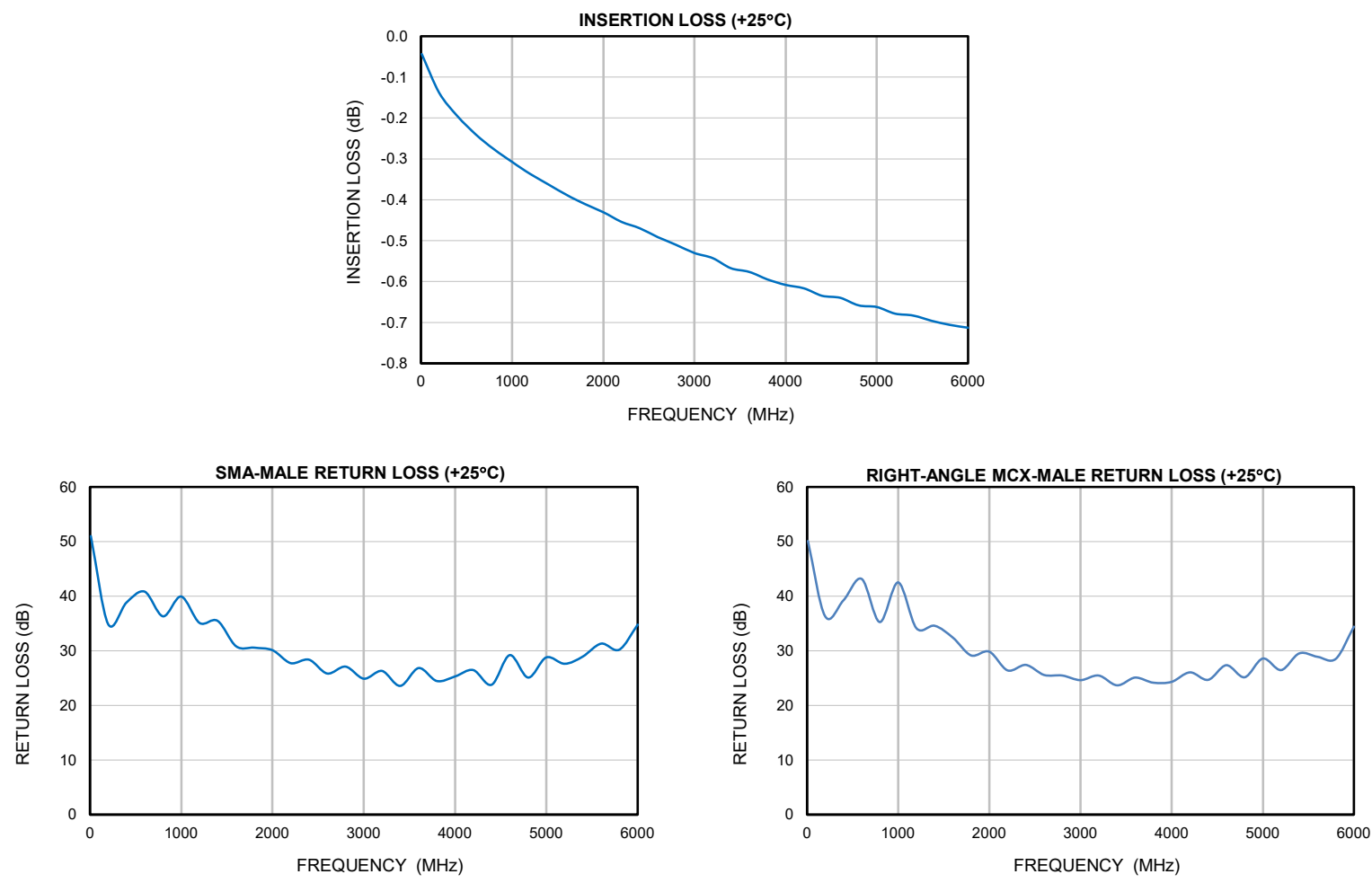
NOTES

- 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



Flexible Cable SMA-M to RA MCX-M**FL086-12SMMCR+***Typical Performance Data*

FREQ.	INSERTION LOSS	SMA-MALE RETURN LOSS	RIGHT-ANGLE MCX-MALE RETURN LOSS
(MHz)	(dB)	(dB)	(dB)
10	0.04	51.00	50.10
200	0.14	34.89	36.28
400.0	0.20	38.84	39.21
600.0	0.24	40.80	43.17
800.0	0.28	36.32	35.27
1000.0	0.31	39.91	42.49
1200.0	0.34	35.10	34.14
1400.0	0.36	35.48	34.59
1600.0	0.39	30.81	32.41
1800.0	0.41	30.55	29.17
2000.0	0.43	30.10	29.83
2200.0	0.45	27.74	26.41
2400.0	0.47	28.34	27.40
2600.0	0.49	25.85	25.60
2800.0	0.51	27.11	25.46
3000.0	0.53	24.89	24.62
3200.0	0.54	26.28	25.49
3400.0	0.57	23.56	23.67
3600.0	0.58	26.84	25.08
3800.0	0.59	24.47	24.16
4000.0	0.61	25.28	24.32
4200.0	0.62	26.46	26.06
4400.0	0.63	23.77	24.68
4600.0	0.64	29.21	27.35
4800.0	0.66	25.08	25.16
5000.0	0.66	28.81	28.59
5200.0	0.68	27.60	26.49
5400.0	0.68	28.95	29.54
5600.0	0.70	31.31	28.89
5800.0	0.71	30.20	28.54
6000.0	0.71	34.76	34.42

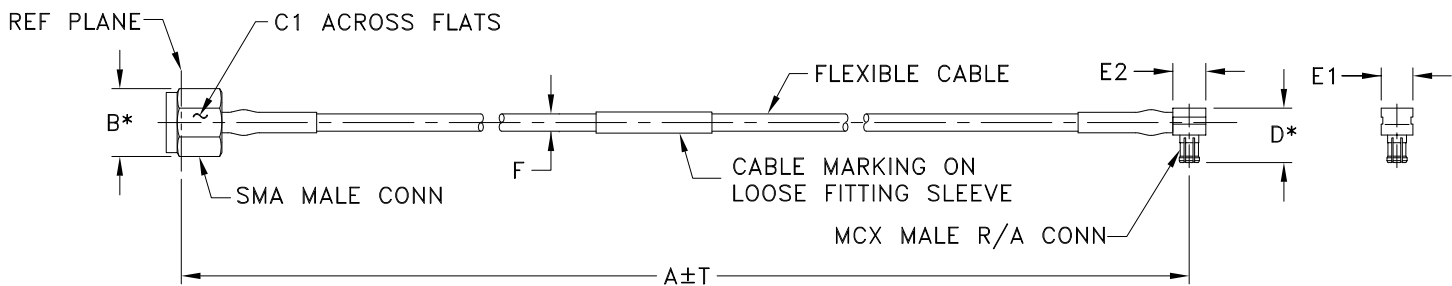


Case Style

Outline Dimensions

SE

SE3526



Case Style #	A		B	C1	C2	D	E1	E2	F	T		WT. GRAMS
	INCH	MM							FL86-ASMMCR+	INCH	MM	
SE3526-12	12.00	304.80	.36 (9.14)	.315 (8.0)	—	.338 (8.6)	.197 (5.00)	.22 (5.6)	.106±.004 (2.64±0.1)	.10	2.54	10.2

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

- Notes:
- 1. 086 Flexible™ Coaxial Cable.
 - 2. "A" Represents Length of Cable.



ISO 9001 ISO 14001 CERTIFIED



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



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RF/IF MICROWAVE COMPONENTS