



Mini-Circuits

HAND
FLEX™

Coaxial Cable

141-12BM+

50Ω 12 inch DC to 3 GHz BNC-Male

THE BIG DEAL

- Wideband frequency coverage, DC-3GHz
 - Low Loss, 0.26 dB at 3 GHz
 - Excellent Return Loss, 25 dB at 3 GHz
 - Hand formable to almost any custom shape without special bending tools
 - 8mm bend radius for tight installations
 - Insulated outer jacket standard¹
- Ideal for interconnect of assembled systems



Generic photo used for illustration purposes only

Model No.	141-12BM+
Case Style	KQ2160-12
Connectors	BNC-Male

+RoHS Compliant

The +Suffix identifies RoHS Compliance.
See our website for methodologies and qualifications

APPLICATIONS

- Replacement for custom bent 0.141" semi-rigid cables
- Communication Receivers and Transmitters
- Military and Aerospace System
- Environmental and Test Chambers

PRODUCT OVERVIEW

141-BM+ series Hand-Flex™ coaxial cables are 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 8mm to accommodate tight layouts without the need for bending tools, adapters or brackets. BNC-male connectors make these cables ideal for connection of assemblies with BNC connector types. 141-BM+ series cables are available in a variety of lengths to meet your system needs.

KEY FEATURES

Features	Advantages
Hand-formable RF cables	Facilitates the assembly of coaxial systems and sub-systems without the need for special cablebending tools or adapters. Reduces the risk of damage during bending.
Tight bend-radius, 8mm	8mm bend-radius makes the cable ideal for connections in tight spaces and crowded layouts.
Low insertion loss	Minimizes overall signal path loss.
Excellent Return Loss	Minimizes signal reflection and VSWR ripple contribution.
BNC-Male connectors	Supports easy interconnection of components and equipment in systems with BNC connector types.
High Power Handling Capability: <ul style="list-style-type: none">• 546W at 0.5 GHz• 180W at 3 GHz	Supports medium to high RF power levels used in transmit paths. Uses thicker cable compared to our 086-XBM+ series cables resulting in higher power handling.

1. Unjacketed cable also available upon request.

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ECO-018947
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ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		3	GHz
Length ²		12			inches
Insertion Loss	DC - 3	—	0.17	0.55	dB
Return Loss	DC - 3	19	37	—	dB

2. Custom sizes available, consult factory.

ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-55°C to +105°C
Storage Temperature	-55°C to +105°C
Power Handling at +25°C, Sea Level	546W at 0.5 GHz 387W at 1 GHz 273W at 2 GHz 180W at 3 GHz

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

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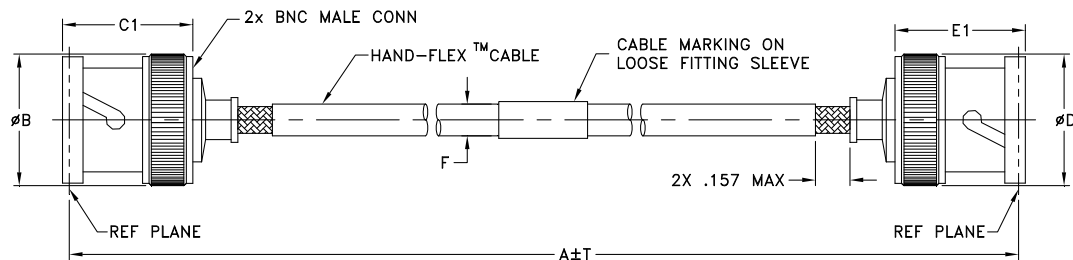
CABLE CONSTRUCTION



- Center Conductor: Silver Plated Copper Clad Steel
- Dielectric: Solid PTFE
- Outer Shield: Copper Braid, Tin Soaked
- Jacket: FEP, Blue (Unjacketed cable also available upon request)

Connectors:
Body & Coupling Nut: Brass, Nickel plated
Center Pin: Brass, Gold plated

OUTLINE DRAWING



OUTLINE DIMENSIONS (Inch mm)

A	B	C1	C2	D	E1	E2	F	T	wt
12.0	.57	.59	-	.57	.59	-	.163±.004	.10	grams
304.80	14.48	14.99	-	14.48	14.99	-	4.14±0.10	2.54	34.12

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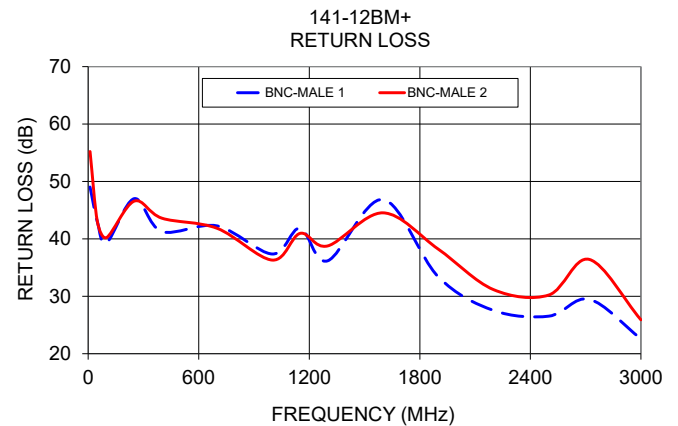
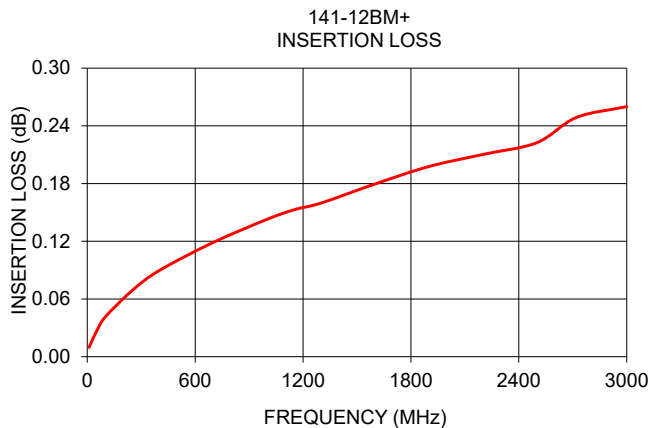
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TYPICAL PERFORMANCE DATA AND CHARTS

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	
		BNC-Male	BNC-Male
10	0.01	49.03	55.21
50	0.03	42.94	42.97
100	0.04	39.31	40.23
250	0.07	47.01	46.58
400	0.09	41.28	43.60
700	0.12	42.26	41.84
1000	0.14	37.37	36.31
1150	0.15	41.87	40.96
1300	0.16	36.19	38.78
1600	0.18	46.86	44.54
1900	0.20	33.40	38.22
2200	0.21	27.54	31.16
2500	0.22	26.54	30.22
2720	0.25	29.48	36.42
3000	0.26	22.61	25.90



NOTES

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- 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



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