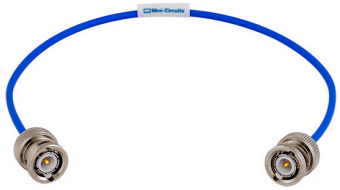
HAND FLEX™

Coaxial Cable

086-BM+ Series

50Ω DC to 3 GHz



CASE STYLE: KP2467

The Big Deal

- Hand-formable to any shape, 6mm min bend radius
- BNC-Male connectors
- Excellent return loss
- Low insertion loss
- Ideal for interconnect of assembled systems

Product Overview

086-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 6mm 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. 086-BM+ series cables are available in a variety of lengths to meet your system needs.

Key Features

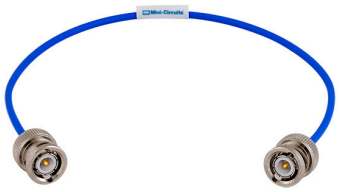
Feature	Advantages
Hand-formable RF cables	Facilitates the assembly of coaxial systems and sub-systems without the need for special cable-bending tools or adapters. Reduces the risk of damage during bending.
Tight bend-radius, 6mm	6mm bend-radius makes the cable ideal for connections in tight spaces 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.
Good power handling • 211W at 0.5 GHz • 80W at 3 GHz	Supports medium to high RF power levels used in transmit paths.

HAND FLEX™

Coaxial Cable

086-24BM+

50Ω 24 inch DC to 3 GHz



CASE STYLE: KP2467-24

Connectors	Model
BNC-Male	086-24BM+

Maximum Ratings

Operating Temperature	-55°C to 105°C		
Storage Temperature	-55°C to 105°C		
Power Handling at 25°C, Sea Level	211W	at	0.5 GHz
	150W	at	1 GHz
	101W	at	2 GHz
	80W	at	3 GHz

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

Features

- Wideband frequency coverage, DC to 3 GHz
- Low Loss, 0.8 dB at 3 GHz
- Excellent Return Loss, 29 dB at 3 GHz
- Hand formable to almost any custom shape without special bending tools
- 6mm bend radius for tight installations
- Insulated outer jacket standard[1]
- Connector interface, meets MIL-STD-348
- **Ideal for interconnect of assembled systems**

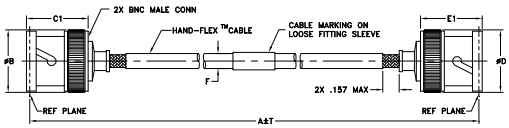
Applications

- Replacement for custom bent 0.086" semi-rigid cables
- Communication receivers and transmitters
- Military and aerospace system
- Environmental and test chambers

+RoHS Compliant

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

Outline Drawing

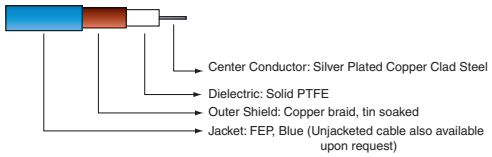


Outline Dimensions (inch / mm)

A	B	C1	C2	D
24.0	.57	.59	--	.57
609.60	14.5	14.99	--	14.5

E1	E2	F	T	wt
.59	--	.108	0.15	grams
14.99	--	2.75	3.81	31.37

Cable Construction



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

Electrical Specifications at 25°C

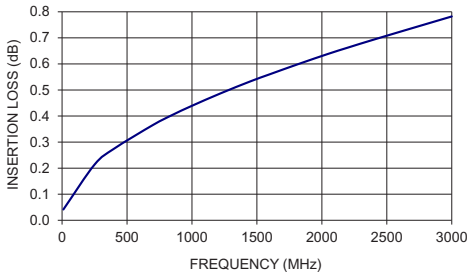
Parameter	Condition (GHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC		3	GHz
Length[2]			24		inches
Insertion Loss	DC - 3	—	0.51	1.10	dB
Return Loss	DC - 3	19	35	—	dB

1. Unjacketed cable also available upon request.
2. Custom sizes available, consult factory.

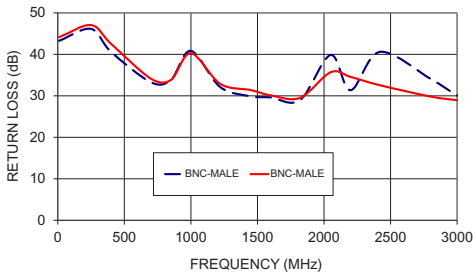
Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	
		BNC-Male	BNC-Male
10	0.04	43.3	44.1
250	0.21	46.1	47.1
400	0.27	40.6	42.6
700	0.37	33.3	34.1
850	0.40	33.8	33.8
1000	0.44	40.8	40.3
1220	0.49	32.1	32.9
1450	0.53	29.9	31.4
1600	0.56	29.6	30.1
1820	0.60	29.0	29.5
2050	0.64	39.8	35.7
2200	0.66	31.4	34.6
2420	0.70	40.6	32.6
2800	0.75	34.1	29.8
3000	0.78	30.0	28.9

086-24BM+
INSERTION LOSS



086-24BM+
RETURN LOSS



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/MCLStore/terms.jsp