

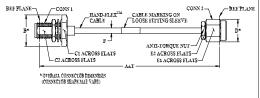
# 50 $\Omega$ 10 inch DC to 18 GHz

#### **Maximum Ratings**

Operating Temperature	-55°C to 105°C		
Storage Temperature	-55°C to 105°C		
Power Handling at 25°C,	211W at 0.5 GHz		
Sea Level	150W at 1 GHz		
	101W at 2 GHz		
	59W at 6 GHz		
	45W at 10 GHz		
	35W at 18 GHz		

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

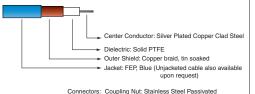
## Outline Drawing



## Outline Dimensions (inch )

А	в	C1	C2	D
10.0	.51	.438	.232	.36
254.00	12.95	11.13	5.89	9.14
E1	E2	F	т	wt
<b>E1</b> .313	<b>E2</b> .250	<b>F</b> .108	<b>T</b> 0.1	wt grams

## Cable Construction



Connectors: Coupling Nut: Stainless Steel Passivated Body: Stainless Steel Gold Plated Center Pin: Brass, Gold Plated (SMA-M) and BeCuB Gold Plated (SMA-F)

#### Features

- Wideband frequency coverage, DC to 18 GHz
- Low Loss, 1.0 dB at 18 GHz
- Excellent Return Loss, 25 dB at 18 GHz
- SMA-F bulkhead connector at one end
  Hand formable to almost any custom shape without used is a balk of the set of
- special bending tools6mm bend radius for tight installations
- Anti-torque nut prevents cable stress during installation
- Insulated outer jacket standard
- Connector interface, meets MIL-STD-348

#### Applications

- Bulkhead connector mounts on front panel of equipment racks
- Replacement for custom bent 0.086" semi-rigid cables
- Communication receivers and transmitters
- Military and aerospace system
- Environmental and test chambers Electrical Specifications at 25°C

Parameter	Condition (GHz)	Min.	Тур.	Max.	Unit
Frequency Range		DC		18	GHz
Length <sup>1</sup>			10		inches
Insertion Loss	DC - 2	—	0.2	0.41	dB
	2 - 6	—	0.36	0.74	
	6 - 10	—	0.58	1.0	
	10 - 18	—	0.78	1.36	
Return Loss	DC - 2	23	37	—	
	2 - 6	23	31	—	dB
Return Loss	6 - 10	17	30	—	
	10 - 18	16	27	—	

1. Custom sizes available, consult factory.

# Typical Performance Data

0.05 0.20	SMA-Male	SMA-Female Bulkhead
	40.3	
0.20		40.4
	36.9	37.8
0.27	35.9	36.1
0.30	31.9	34.3
0.43	27.5	28.8
0.49	25.4	25.9
0.54	28.8	28.7
0.57	37.2	33.3
0.62	29.9	28.6
0.67	25.3	24.1
0.70	25.2	24.7
0.76	29.4	36.2
0.86	24.4	35.3
0.91	27.3	26.2
1.02	25.2	24.6
		86-10SBSM+ ETURN LOSS
	45 40 35 30 20 20 15 5 30 40 40 35 30 20 20 5 30 40 40 35 30 20 20 40 40 40 35 5 30 20 20 40 40 40 40 40 40 40 40 40 40 40 40 40	
	0.30 0.43 0.54 0.57 0.62 0.67 0.70 0.76 0.86 0.91	0.30 0.43 0.43 0.49 0.54 0.57 0.62 29.9 0.67 25.3 0.70 25.2 0.76 29.4 0.67 25.3 0.70 25.2 0.76 29.4 0.86 24.4 0.91 27.3 1.02 25.2 0.62 29.9 0.67 25.3 0.70 25.2 0.70 25.2 0.70 25.2 0.70 25.2 0.70 25.2 0.70 25.2 0.70 25.2 0.70 25.2 0.70 25.2 0.70 25.2 0.70 25.2 0.70 25.2 0.76 29.4 0.86 29.4 0.86 29.4 0.86 29.4 0.86 29.4 0.86 29.4 0.86 29.4 0.86 29.4 0.86 29.4 0.86 29.4 0.86 29.4 0.86 29.4 0.91 25.2 0.70 0.70 25.2 0.70 0.70 25.2 0.70 0.70 25.2 0.70 0.70 25.2 0.70 0.70 0.70 25.2 0.70

0

0

3000

FREQUENCY (MHz) For detailed performance specs & shopping online see web site

9000

12000

15000

6000

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9000

FREQUENCY (MHz)

/ini-Circ

12000

15000

18000

6000

0.0 +

3000

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuit's 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 sensitis thereunder, please visit Mini-Circuit's vebsite at www.minicircuits.com/MCLStore/terms.jsp.

# 086-10SBSM+



#### CASE STYLE: KP1567-10

Connectors		Model	Price	Qty.
Conn1	Conn2			
SMA-Male	SMA-Female Bulkhead	086-10SBSM+	\$12.75 ea.	(1-9)

#### +RoHS Compliant

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

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18000