



COAXIAL

DC Block SMA

BLK-18-S+

Mini-Circuits

50Ω 0.01 to 18 GHz

THE BIG DEAL

- Broadband performance
- Low insertion loss
- Rugged unibody construction
- Off-the-shelf availability



Generic photo used for illustration purposes only

APPLICATIONS

- Test and measurement instrumentation
- Communication systems
- Defense systems

Model No.	BLK-18-S+
Case Style	FF888
Connectors	SMA

+RoHS Compliant

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

PRODUCT OVERVIEW

Mini-Circuits' BLK-18-S+ is a coaxial DC Block supporting a wide range of applications from 10 MHz to 18 GHz including test and measurement. This model provides low insertion loss, excellent return loss and voltage handling upto 50V. This unit features SMA-Female connector at one end and SMA-Male at another end and comes in rugged stainless steel body.

KEY FEATURES

Features	Advantages
Wideband, 10 MHz to 18 GHz	Wide frequency range up to 18 GHz provides application flexibility and makes this model ideal for broad-band and multi-band use.
Excellent Return Loss, 18 dB typ at 8 GHz	Provides good matching for 50Ω systems and minimizes signal reflections across wide frequency range enabling its use in test and measurement.
Low insertion loss, 1 dB typ at 18GHz	Provides excellent signal power transmission from input to output.
Stainless steel construction	Stands up to wear and tear in demanding test environments and provides excellent reliability.
Very wide operating temperature range, -55 to +100 °C	Withstands wide operating conditions



ELECTRICAL SPECIFICATIONS AT 25°C

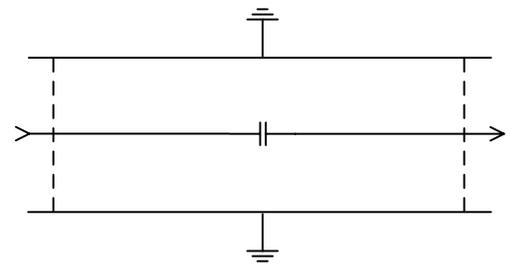
Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		0.01	—	18	GHz
Insertion Loss	0.01 - 0.1	—	0.02	0.2	dB
	0.1 - 1.0	—	0.07	0.3	
	1.0 - 4.0	—	0.15	0.65	
	4.0 - 8.0	—	0.38	1.0	
	8.0 - 18	—	1.00	—	
Return Loss	0.01 - 0.1	20	26	—	dB
	0.1 - 1.0	20	36	—	
	1.0 - 4.0	20	24	—	
	4.0 - 8.0	15	18	—	
	8.0 - 18	—	12	—	

MAXIMUM RATINGS

Parameter	Ratings
Operating Case Temperature	-55 °C to +100 °C
Storage Temperature	-55 °C to +100 °C
DC Input Voltage at inner/outer conductor	50V max.
Input Power	36 dBm max.

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

ELECTRICAL SCHEMATIC





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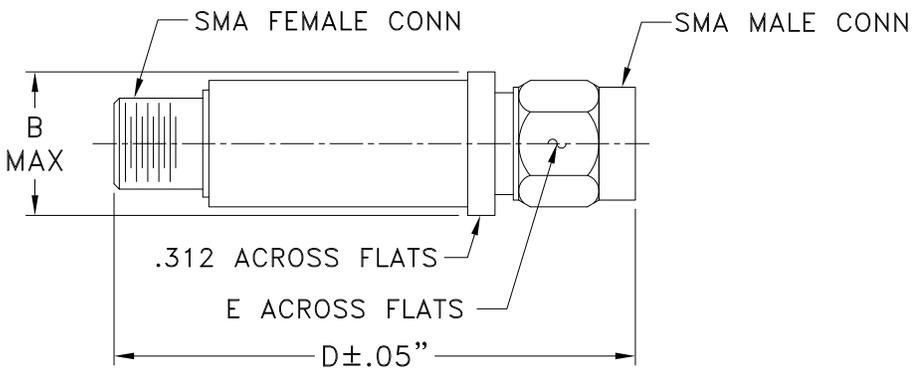
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COAXIAL CONNECTIONS

PORT 1	SMA-Male
PORT 2	SMA-Female

OUTLINE DRAWING



OUTLINE DIMENSIONS (Inch/mm)

B	D	E	wt.
.410	1.18	.312	grams
10.41	29.97	7.92	7.0

Note. Please refer to case style drawing for details



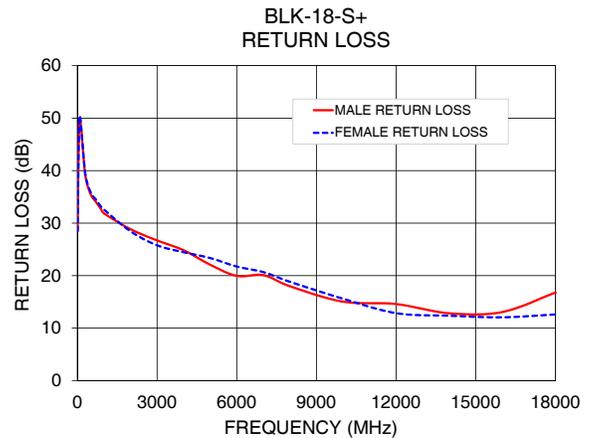
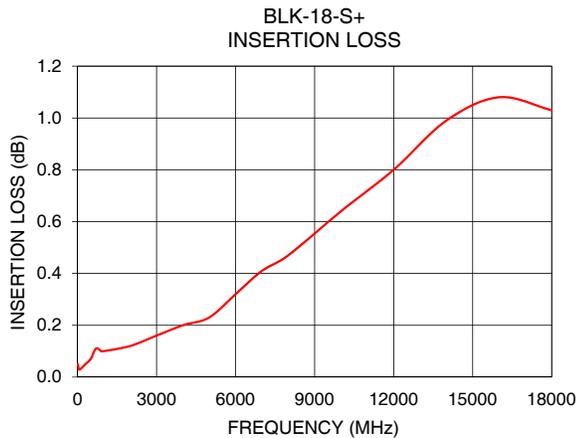
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TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	
		Male	Female
10	0.05	28.49	28.48
50	0.03	45.13	45.06
100	0.03	50.04	50.34
500	0.07	35.50	35.89
700	0.11	34.05	34.48
1000	0.10	31.87	32.59
2000	0.12	28.84	28.45
4000	0.20	24.84	24.46
6000	0.32	19.95	21.73
7000	0.41	20.10	20.67
8000	0.47	17.98	18.83
10000	0.64	15.04	15.60
12000	0.80	14.59	12.85
16000	1.08	13.07	12.06
18000	1.03	16.78	12.60



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

