

## 50 Ohm 1.0 mm Male to 1.0 mm Female DC Block Inner, 50 kHz to 110 GHz Rated 16 Volt

Fairview Microwave's SD8259 is an inner DC block with 1.0 mm (W1) connectors. It has a blocking capacitor on the inner conductor and operates from 50 kHz to 110 GHz. Our 1.0 mm (W1) DC block offers good insertion loss of 2.5 dB and has a minimum operating voltage of 16 Vdc. DC blocks are commonly used to filter out unwanted DC signals, while allowing AC drive signals to pass through. They can help improve signal to noise ratio (SNR), eliminate ground loops, or provide isolation in your test setup. All of Fairview Microwave's DC blocks are in stock and available to ship same-day.



### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	50KHz		110	GHz
Impedance		50		Ohms
VSWR		1.4:1		
Insertion Loss			2.5	dB
Operating Voltage (DC)			16	Volts
Group Delay		94		ps
Capacitance		10,000		pF
Input Power (CW)			1	Watt

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	0.001 - 26	26 - 65	65 - 110			GHz
VSWR, Max	1.4:1	1.9:1	2.3:1			

### Mechanical Specifications

<b>Size</b>	
Length	1.18 in [29.97 mm]
Width	0.441 in [11.2 mm]
Height	0.441 in [11.2 mm]
Weight	0.013 lbs [5.9 g]

### Configuration

Design	Inner DC Block
Package Type	Connectorized

Description	Connector 1	Connector 2
Type	1.0mm Male	1.0mm Female

### Environmental Specifications

#### Temperature

Operating Range	-55 to 100 deg C
Shock	100g peak sawtooth, method 213, test condition 1

### Features:

- Inner DC Blocks
- 1.0 mm (W1) connectorized configuration
- 50 kHz to 110 GHz Frequency Range
- Max Power 1 Watt (CW)
- 50 Ohm Impedance
- Typical VSWR of 1.4:1

### Applications:

- Test and Measurement
- Ground Loop Elimination
- Signal to Noise Ratio (SNR) Improvement

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**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

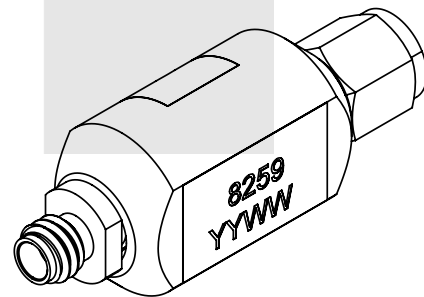
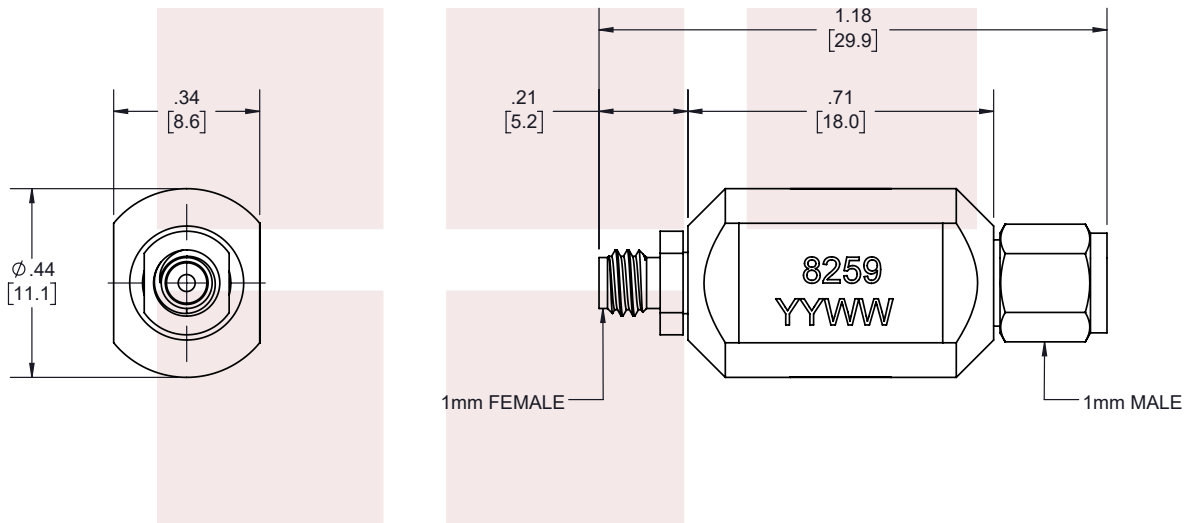
50 Ohm 1.0 mm Male to 1.0 mm Female DC Block Inner, 50 kHz to 110 GHz Rated 16 Volt from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

Click the following link to obtain additional part information: [50 Ohm 1.0 mm Male to 1.0 mm Female DC Block Inner, 50 kHz to 110 GHz Rated 16 Volt SD8259](#)

URL: <https://www.fairviewmicrowave.com/inner-dc-block-0.05-mhz-110-ghz-1.0mm-connectors-sd8259-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	8/8/2022	S. PONG



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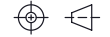
TITLE  
50 Ohm 1.0 mm Male to 1.0 mm Female DC Block  
Inner, 50 kHz to 110 GHz Rated 16 Volt

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. SD8259	REV A
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T-Rev.D