

## Inner DC Block From 10 MHz to 18 GHz With SMA Connectors

Fairview Microwave's SD3244 is an inner DC block with SMA connectors. It has a blocking capacitor on the inner conductor and operates from 10 MHz to 18 GHz. Our SMA DC block offers good insertion loss of 0.5 dB and has a maximum operating voltage of 200 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  | 0.01 |     | 18     | GHz   |
| Impedance  |      | 50  |        | Ohms  |
| VSWR   |      |     | 1.35:1 |       |
| Insertion Loss   |      |     | 0.5    | dB    |
| Operating Voltage (DC)                                 |      |     | 200    | Volts |
| Input Power (CW)<br>derates linearly to 0.2W at +125°C |      |     | 2      | Watts |

### Mechanical Specifications

|                               |                            |
|-------------------------------|----------------------------|
| <b>Size</b>                   |                            |
| Length                        | 0.871 in [22.12 mm]        |
| Width                         | 0.312 in [7.92 mm]         |
| Weight                        | 0.0145 lbs [6.58 g]        |
| Housing Material and Plating  | Passivated Stainless Steel |
| Housing Plating Specification | QQ-P-35                    |

### Configuration

|              |                |
|--------------|----------------|
| Design       | Inner DC Block |
| Package Type | Connectorized  |

| Description                     | Connector 1                | Connector 2                |
|---------------------------------|----------------------------|----------------------------|
| Type                            | SMA Male                   | SMA Female                 |
| Connector Specification         | MIL-STD-348                | MIL-STD-348                |
| Inner Cond Material & Plating   | Beryllium Copper, Gold     | Beryllium Copper, Gold     |
| Inner Cond Plating Spec.        | MIL-PRF-39012              | MIL-PRF-39012              |
| Coupling Nut Material & Plating | Passivated Stainless Steel |                            |
| Coupling Nut Plating Spec.      | QQ-P-35                    |                            |
| Hex Size                        | 5/16 inch                  |                            |
| Body Material & Plating         | Passivated Stainless Steel | Passivated Stainless Steel |
| Body Plating Spec.              | QQ-P-35                    | QQ-P-35                    |

### Environmental Specifications

#### Temperature

|                 |                   |
|-----------------|-------------------|
| Operating Range | -65 to +125 deg C |
|-----------------|-------------------|



### Features:

- Inner DC Block
- Operates from 10 MHz to 18 GHz
- Good Insertion Loss of 0.5 dB Max

### Applications:

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

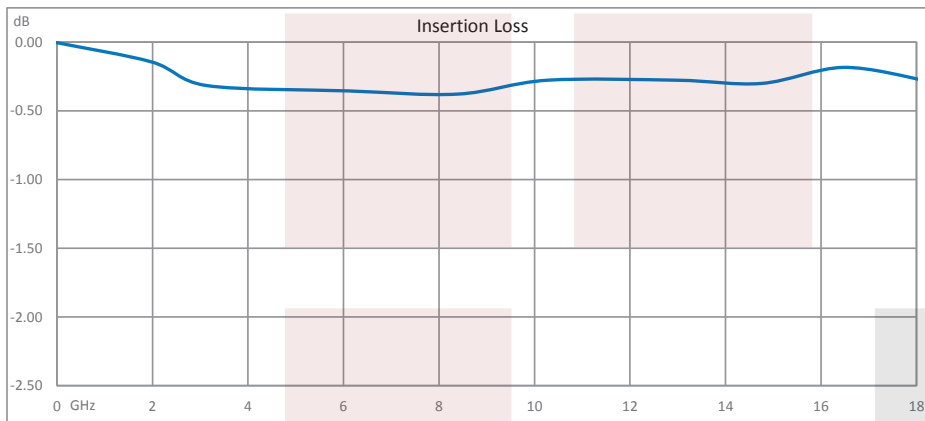
Fairview Microwave  
1130 Junction Dr. #100  
Allen, TX 75013  
Tel: 1-800-715-4396 / (972) 649-6678  
Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

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

**Plotted and Other Data**

Notes:

**Typical Performance Data**

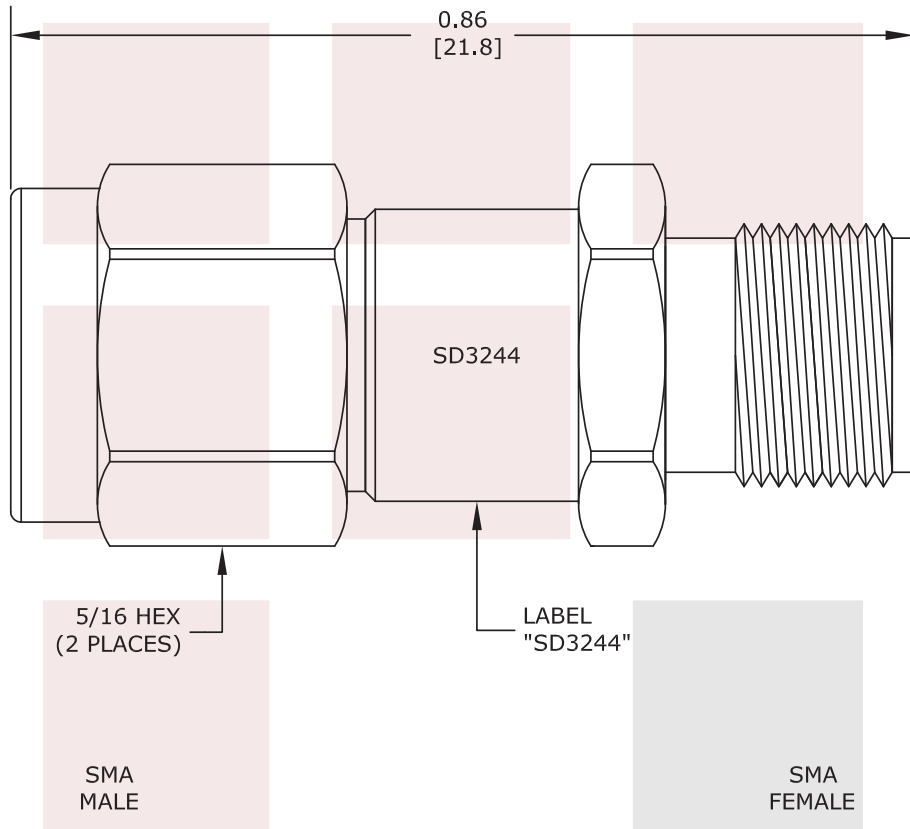


Inner DC Block From 10 MHz to 18 GHz With SMA Connectors from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Inner DC Block From 10 MHz to 18 GHz With SMA Connectors SD3244](#)

URL: <https://www.fairviewmicrowave.com/inner-dc-block-10-mhz-18-ghz-sma-connectors-sd3244-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.



| STANDARD TOLERANCES |       |
|---------------------|-------|
| .X                  | ±0.2  |
| .XX                 | ±0.1  |
| .XXX                | ±0.05 |

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

|   |        |   |       |                    |              |
|---|--------|---|-------|--------------------|--------------|
| <b>FAIRVIEW MICROWAVE INC.</b><br>ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM |        | NOTES:<br>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.<br>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.<br>3. DIMENSIONS ARE IN INCHES [mm]. |       |                    |              |
| TITLE<br>Inner DC Block From 10 MHz to 18 GHz With SMA Connectors           |        | DWG NO<br>SD3244  |       | CAGE CODE<br>3FKR5 |              |
| CAD FILE  | 101916 | SHEET   | SCALE | N/A                | SIZE A 41742 |