



## Coaxial Directional Coupler, 2 to 18 GHz, 20 dB Coupling Level

### Description:

**SCD-0231832012-SF-SA** is a 20 dB coaxial directional coupler that covers the frequency range of 2 to 18 GHz. The nominal insertion loss of the coupler is 1.0 dB and the coupling ripple is  $\pm 1.0$  dB. The directivity of the coupler is 12 dB. The RF connectors of the coupler are SMA female connectors. The power handling of the coupler is 30 watts maximum. Other configurations, such as different connectors for input and output, are available under different model numbers.



### Features:

- Low Insertion Loss
- Flat Coupling Level

### Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

### Electrical Specifications:

| Parameter                 | Minimum | Typical      | Maximum   |
|---------------------------|---------|--------------|-----------|
| Frequency                 | 2 GHz   |              | 18 GHz    |
| Insertion Loss            |         | 1.0 dB       |           |
| Coupling                  |         | 20 dB        |           |
| Coupling Flatness         |         | $\pm 1.0$ dB |           |
| Directivity               |         | 12 dB        |           |
| Port Return Loss          |         | 12 dB        |           |
| Impedance                 |         | 50 $\Omega$  |           |
| Power Handling            |         |              | 30 W (CW) |
| Specification Temperature |         | +25 °C       |           |
| Operating Temperature     | -40 °C  |              | +80 °C    |

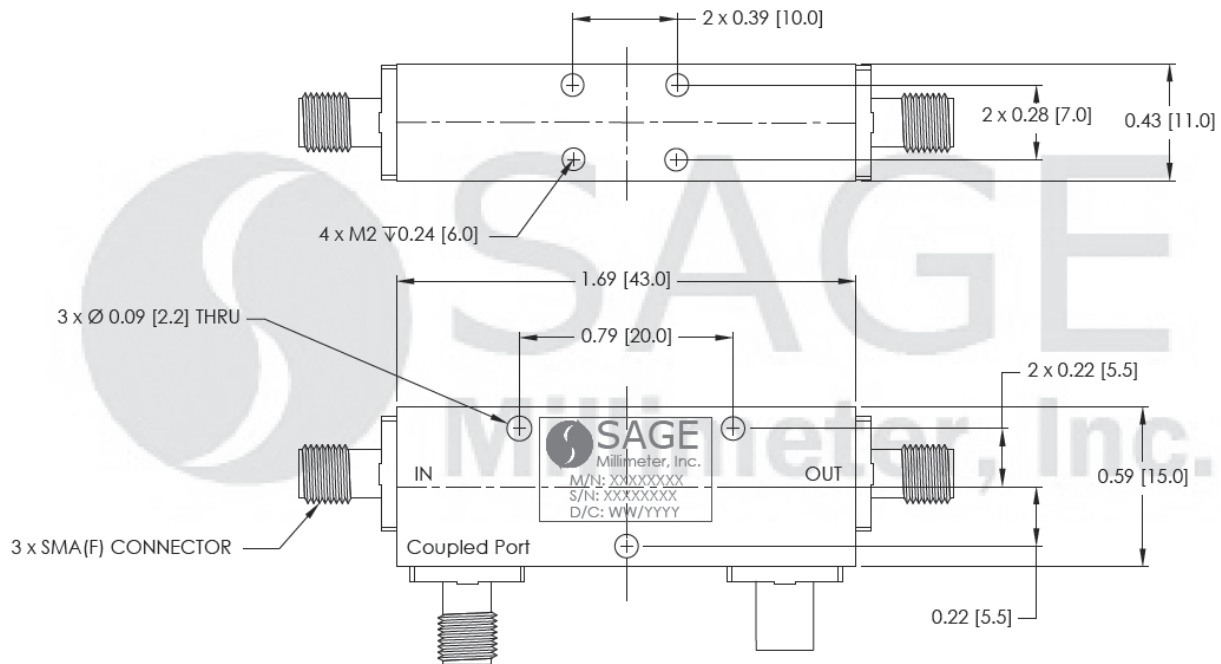
### Mechanical Specifications:

| Item          | Specification |
|---------------|---------------|
| RF Ports      | SMA Female    |
| Case Material | Aluminum      |
| Finishing     | Black Painted |
| Outline       | CD-SS-SR2     |



## Coaxial Directional Coupler, 2 to 18 GHz, 20 dB Coupling Level

**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches [millimeters])



**Note:**

- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

**Caution:**

- Proper torque,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm) shall be used. **SAGE Millimeter torque wrench with model number SCH-08008-U3 is highly recommended.**