

5 to 95 dB Continuously Variable Attenuator  
SMA Female to SMA Female Right Angle Up to  
4 GHz Rated to 5 Watts in a Dial Design

## SA4090



### Configuration

Design

Continuously Variable, Bidirectional Attenuator

### Electrical Specifications Values at 25°C, sea level

| Description       | Minimum | Typical | Maximum | Units |
|-------------------|---------|---------|---------|-------|
| Frequency Range   | DC      |         | 4       | GHz   |
| Impedance         |         | 50      |         | Ohms  |
| Attenuation Value |         | 5 to 95 |         | dB    |
| Step Type         |         | Dial    |         |       |
| Input Power (CW)  |         |         | 5       | Watts |
| Peak Power        |         |         | 500     | Watts |
| Insertion Loss    |         | 5       |         | dB    |
| VSWR              |         |         | 1.8:1   |       |

### Specifications by Frequency

| Description | F1      | F2     | F3     | F4     | F5 | Units |
|-------------|---------|--------|--------|--------|----|-------|
| Range       | DC to 1 | 1 to 2 | 2 to 3 | 3 to 4 |    | GHz   |
| VSWR        | 1.5:1   | 1.6:1  | 1.7:1  | 1.8:1  |    |       |

### Mechanical Specifications

#### Temperature

Operating Range

0 to +85 deg C

Storage Range

+125 to -55 deg C

#### Size

Length

2.38 in [60.45 mm]

Width

4.52 in [114.81 mm]

Height

4.52 in [114.81 mm]

Weight

2.6175 lbs [1.19 kg]

### Connectors

| Description             | Connector 1 | Connector 2 |
|-------------------------|-------------|-------------|
| Type                    | SMA Female  | SMA Female  |
| Connector Specification | MIL-STD-348 | MIL-STD-348 |

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

### Plotted and Other Data

Notes:

- Values at 25 °C, sea level

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5 to 95 dB Continuously Variable Attenuator SMA Female to SMA Female Right Angle Up to 4 GHz Rated to 5 Watts in a Dial Design 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.

For additional information on this product, please click the following link: [5 to 95 dB Continuously Variable Attenuator SMA Female to SMA Female Right Angle Up to 4 GHz Rated to 5 Watts in a Dial Design SA4090](https://www.fairviewmicrowave.com/90db-continuous-attenuator-sma-female-sma-female-5-watts-sa4090-p.aspx)

URL: <https://www.fairviewmicrowave.com/90db-continuous-attenuator-sma-female-sma-female-5-watts-sa4090-p.aspx>

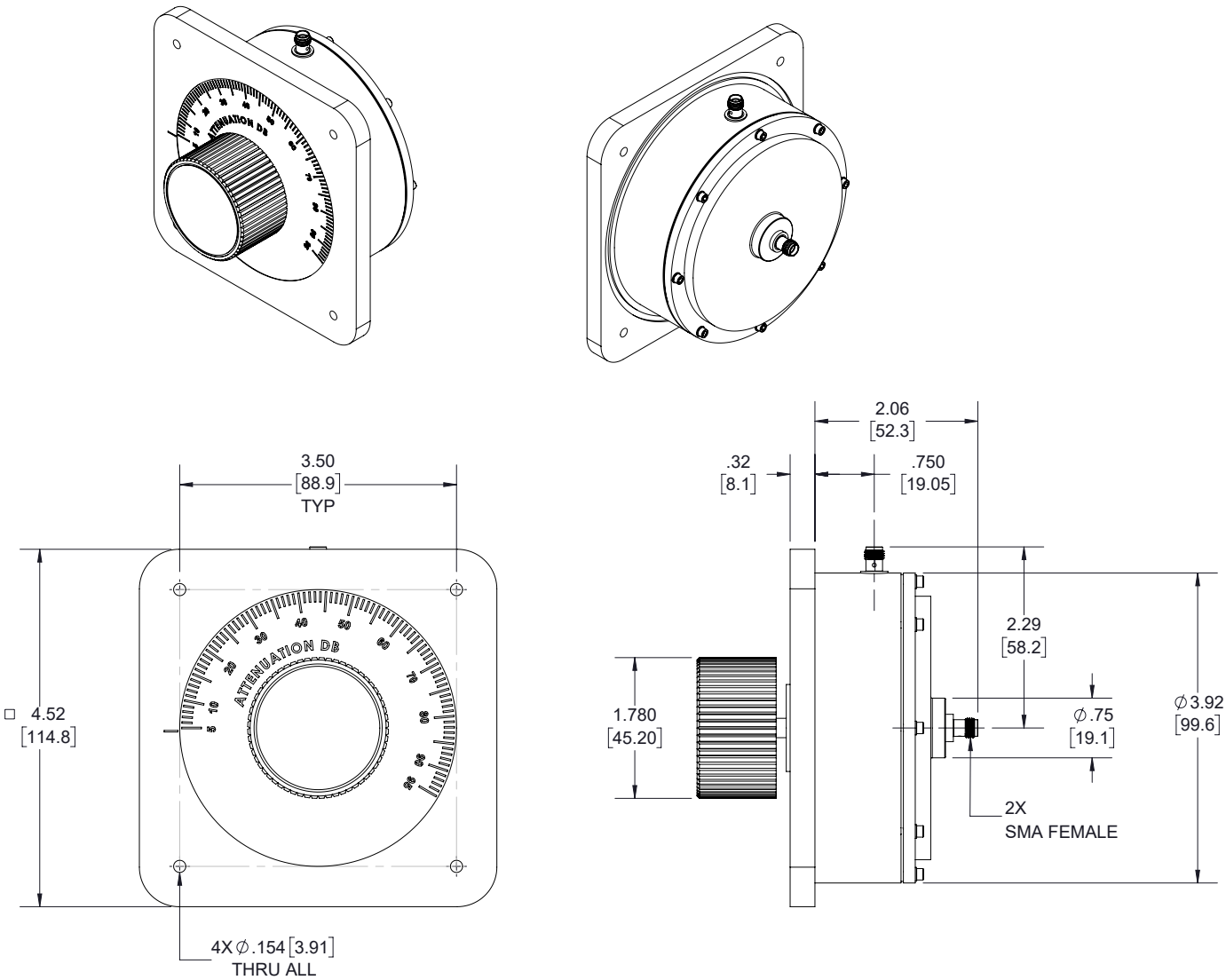
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SA4090 CAD Drawing

5 to 95 dB Continuously Variable Attenuator SMA Female to SMA Female

Right Angle Up to 4 GHz Rated to 5 Watts in a Dial Design

| REVISIONS |                    |            |          |
|-----------|--------------------|------------|----------|
| REV.      | DESCRIPTION        | DATE       | APPROVED |
| B         | PCR SA4090 2022023 | 02/15/2022 | SPONG    |



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TITLE

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

TOLERANCES:

.X = ± .2 [5.08] FRACTIONS  
.XX = ± .02 [.51] ± 1/32  
.XXX = ± .005 [.13] ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0  
12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
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

SCALE N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

| SIZE | CAGE CODE | DRAWN BY | ITEM NO. | REV |
|------|-----------|----------|----------|-----|
| A    | 3FKR5     | KDANG    | SA4090   | B   |

T-Rev D