

**Key Features:**

- Wide operating frequency range from 6.0 to 12.0GHz
- 0.6dB insertion loss and 18dB reverse isolation
- 50 ohm SMA female coaxial connectors
- 10 Watts CW forward power handling, 1 Watts reverse power termination
- -25~+70°C operating temperature range
- Weight 25.2 Grams (0.89 OZ)

**Description:**

F2166-0900-67 is a single junction coaxial isolator with SMA female coaxial connectors operating in the frequency range from 6.0GHz to 12.0GHz and offers 0.6dB insertion loss and 18dB reverse isolation. The coaxial isolator can handle 10 watts of forward CW power and 1 watts of reverse power.

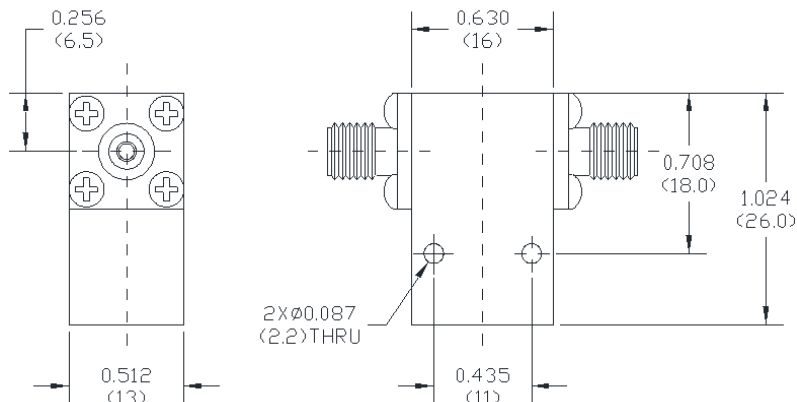
**Electrical Specifications**

| No. | Parameters                     | Units | Specifications        |         |         |
|-----|--------------------------------|-------|-----------------------|---------|---------|
|     |                                |       | Minimum               | Typical | Maximum |
| 1   | Frequency Range                | GHz   | 6.0                   |         | 12.0    |
| 2   | Insertion Loss @ Room temp.    | dB    | -                     |         | 0.6     |
| 3   | Reverse Isolation @ room temp. | dB    | 18.0                  |         |         |
| 4   | VSWR @ room temp.              | -     |                       |         | 1.50:1  |
| 5   | Forward Power CW               | Watts |                       |         | 10      |
| 6   | Reverse Power CW               | Watts |                       |         | 1       |
| 7   | RF Connectors                  | -     | 50 Ohm SMA Female     |         |         |
| 8   | Signal Flow Direction          | -     | From Port 1 to Port 2 |         |         |

**Materials, Environmental & Mechanical Specifications**

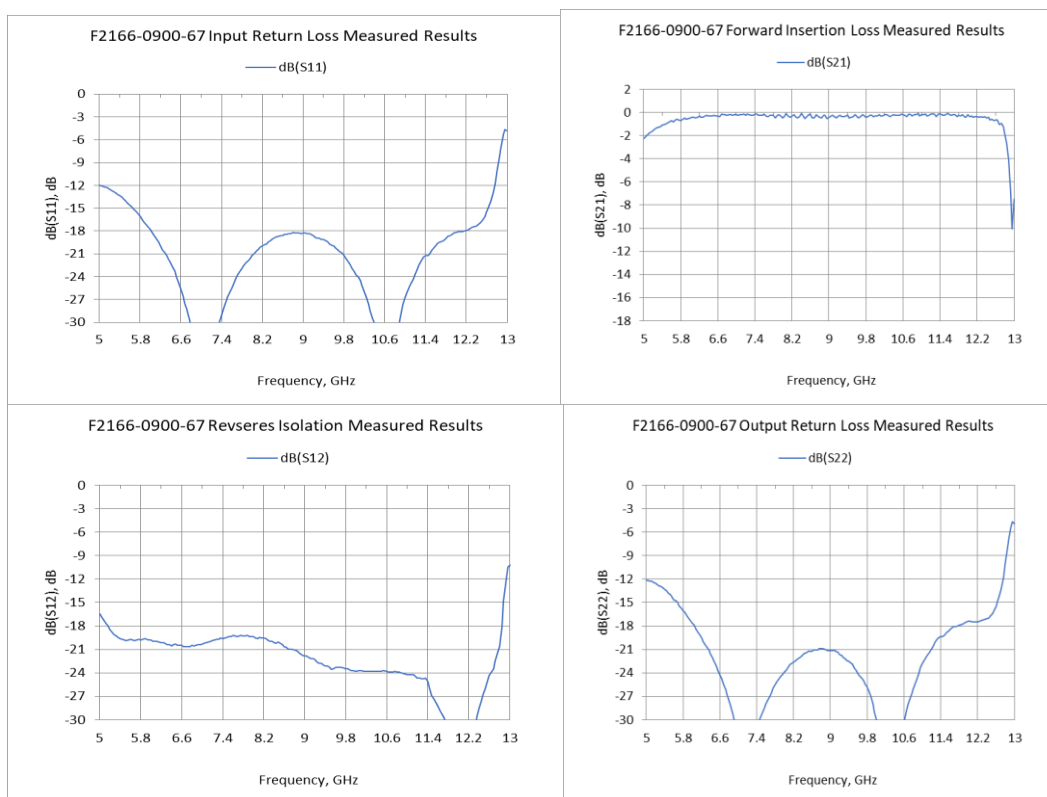
| No. | Parameters               | Specifications                                                          |         |         |
|-----|--------------------------|-------------------------------------------------------------------------|---------|---------|
|     |                          | Minimum                                                                 | Typical | Maximum |
| 1   | Isolator Body            | Aluminum                                                                |         |         |
| 2   | Magnetic Shunt/Shield    | Steel, nickel plated                                                    |         |         |
| 3   | Connector Body           | Brass, gold plated                                                      |         |         |
| 4   | Connector Center Contact | Beryllium Copper, gold plated                                           |         |         |
| 5   | Insulator                | PTFE(Teflon)                                                            |         |         |
| 6   | Operating Temperature    | -25 to +70 °C                                                           |         |         |
| 7   | Survive Temperature      | -55 to +125 °C                                                          |         |         |
| 9   | Outline Dimensions       | 0.630×1.024×0.512 inches <sup>3</sup> (16.0×26.0×13.0 mm <sup>3</sup> ) |         |         |
| 10  | Weight                   | 0.89OZ (25.2 grams)                                                     |         |         |
| 11  | RoHS & REACH Compliance  | Yes                                                                     |         |         |

**Mechanical Structure:**



Note: All units in inches (mm).

**Typical Test Plots:**



**Revision History:**

| Revision | Date       | Description     | Comments |
|----------|------------|-----------------|----------|
| A00      | 06/18/2020 | Initial Release |          |
|          |            |                 |          |
|          |            |                 |          |