

Product Features

The P1dB SMA directional coupler is designed to operate from 4 to 8 GHz and is available in 10dB, 20dB. The RF Coupler has SMA Female connectors and can handle power levels from 10 to 50 Watts, depending on the coupling value. This SMA Coupler is a good solution for signal sampling, such as in a production test system. Other coupling values are available upon request.



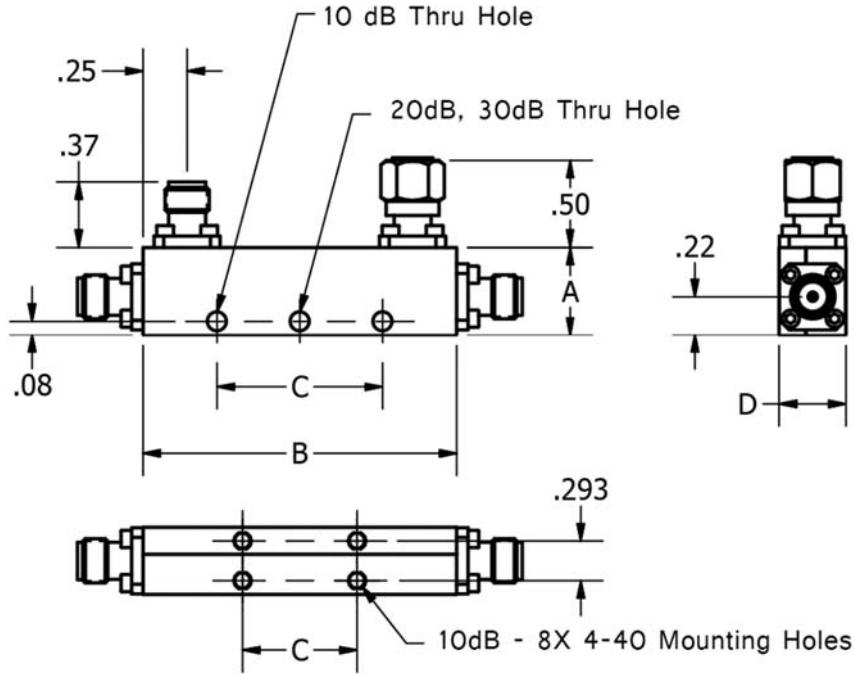
Electrical Specification: $T_{Ambient} = 25^{\circ} C$

| Parameter | Frequency Range | Units | Min | Typical | Max | Notes |
|--------------------|-----------------|-------|-------|---------|------|----------------------------------|
| Impedance | 4 to 8 GHz | Ohms | — | 50 | — | |
| Coupling Accuracy | 4 to 8 GHz | dB | — | — | ±1.0 | |
| Insertion Loss | 4 to 8 GHz | dB | — | — | 0.25 | |
| Directivity | 4 to 8 GHz | dB | 20 | — | — | |
| Flatness | 4 to 8 GHz | dB | ±0.75 | — | — | |
| VSWR, Main Line | 4 to 8 GHz | 1: | — | — | 1.25 | |
| VSWR, Coupled Line | 4 to 8 GHz | 1: | — | — | 1.25 | |
| Average Power | 4 to 8 GHz | Watts | — | — | 10 | Linearly derates to 10% at +85°C |
| 10 dB | | | | | | |
| 20 dB | | | | | | |

Mechanical Specification

| Parameter | Description | Notes |
|--------------------------------|------------------------------|-------|
| Connector Type | SMA Female | |
| Connector Material and Plating | Nickel Plated Brass | |
| Contact Material and Plating | Gold Plated Beryllium Copper | |
| Housing | Aluminum | |
| Operating Temperature | -55 to 85° C | |

Drawing



| Coupling Value | A | B | C | Mtg Holes |
|----------------|-----|---|---|-----------|
| 10 dB | 0.5 | 1 | — | E |
| 20 dB | 0.5 | 1 | — | E |

Part Number Definition

| Coupling Value | Part Number |
|----------------|----------------------|
| 10 dB | P1CP-SAF-0408G10W-10 |
| 20 dB | P1CP-SAF-0408G50W-20 |
| 30 dB | P1CP-SAF-0408G50W-30 |