

- ◆ Precise Setting of Coupling Value
- ◆ Single (CE-D) and Dual (CF-D) Models
- ◆ 750 Watt Average Power Rating
- ◆ High Directivity
- ◆ Air Dielectric for minimal RF Insertion Loss
- ◆ High Reliability, Low PIM
- ◆ RoHS Compliant



Microlab loop couplers are set-and-lock devices that provide precise coupling values over customer specified frequency ranges and excellent unit-to-unit tracking. Air dielectric main lines provide the extremely low insertion loss required to handle high power levels. They are available in single and dual units for use over bandwidths of 15% or less, anywhere in the 200 to 3000 MHz frequency range.

Microlab loop couplers are constructed from standardized designs and employ stocked components. Loop couplers exhibit a 6 dB per octave coupling variation, generally acceptable for system applications. Options include other connectors for the coupled port, 3 and 4 coupled ports, substitution of a loop coupler with a low pass filter that can carry a DC bias to the main line, and incorporation of a DC Block into the main line as required. Call for details. (01/13)

| Frequency Range, MHz: | 200 - 400 | 400 - 800 | 800 - 1200 | 1200 - 3000 |
|--------------------------------|-----------|-----------|------------|-------------|
| Available Coupling Values, dB: | 30 - 50 | 25 - 50 | 20 - 50 | 20 - 50 |
| Main Line VSWR, max: | 1.20:1 | 1.20:1 | 1.20:1 | 1.25:1 |
| Coupled Line VSWR, max: | 1.25:1 | 1.25:1 | 1.25:1 | 1.50:1 |
| Dissipative Loss, dB max: | 0.05 | 0.05 | 0.05 | 0.10 |
| Directivity, dB: | 25 | 25 | 25 | 20 |

Power Rating: 750W avg., 10 kW pk.
Impedance: 50Ω nominal
Intermod. Distortion: <-140 dBc (2 x 20W)
Temperature: -35°C to +75°C
Applications: Indoor
Body Finish: Passivated Aluminum
7-16 Connectors: Silver or triplate
SMA Connectors: Passivated stainless steel
Weight CE/CF, nom: 10 (280)/15 (425) oz (g)

Coupling Specifications and Limitations

Coupling accuracy at mid-band:

For Coupling Values: 20 - 40 >40 dB
Accuracy, dB: ±0.25 ±0.35

Coupling flatness:

Bandwidth: 2% 4% 10% 15%
Flatness, dB: ±0.1 ±0.2 ±0.5 ±0.7

Available coupled arm connectors: N or SMA

