



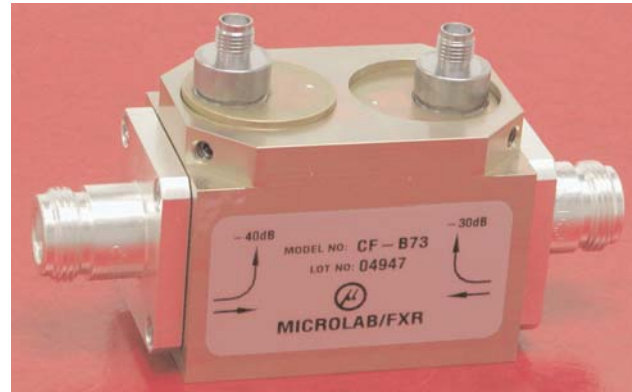
MICROLAB/FXR

CE-N and CF-N series

Loop Coupler

High Power, Low Loss, Low PIM
Range 200 - 3000 MHz

- ◆ Precise Setting of Coupling Value
- ◆ Single and Dual Models
- ◆ Up to 750 Watt Average Power
- ◆ High Directivity
- ◆ Air Dielectric for minimal RF Insertion Loss
- ◆ High Reliability, Low PIM
- ◆ RoHS Compliant
- ◆ Models for all Cellular/UMTS bands



Microlab/FXR 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, which is generally acceptable for most system applications. Specify type and gender of connectors with order.

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. Model number assigned with order. Call for details. (8/06)

| 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 min: | 25 | 25 | 25 | 20 |
| Power Rating, Average: | 750W | 600W | 500W | 350W |

Impedance: 50Ω nominal
 Intermod. Distortion: <-140 dBc (2 x 20W)
 Environment: -35 to +75°C, Indoor
 Peak Power: 10 kW max.
 Body Finish: Passivated Aluminum
 N Connectors: Silver or triplate
 SMA Connectors: Passivated stainless steel
 Weight CE/CF: 9 (250)/13 (365) oz (g)

Coupling Specifications and Limitations

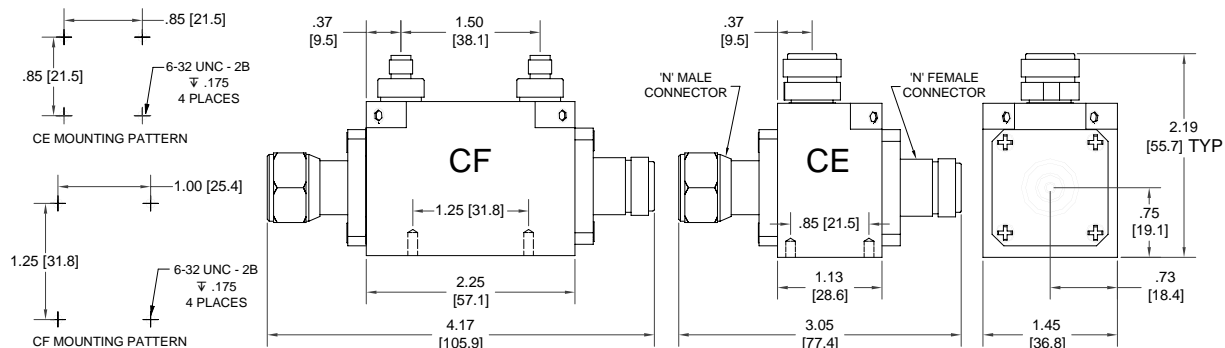
Coupling accuracy at mid-band:

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



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