



# MICROLAB/FXR

CE-C series

# Loop Couplers

High Power, Low Loss  
800 – 2000 MHz

- ◆ Version for Cellular/GSM & PCS/DCN Radio Bands
- ◆ 750 Watt Average Main Line Power
- ◆ High Directivity
- ◆ Air Dielectric for minimal RF Loss
- ◆ High Reliability, Low Intermodulation
- ◆ N or 7-16 mm DIN Connectors
- ◆ Precise set and lock of Coupling Value
- ◆ See [CE series](#) for standard units



The Microlab/FXR CE-C Series of Loop Couplers has been designed to operate anywhere in the 200 to 3000 MHz frequency range. Each unit is a set and lock device enabling the setting of very precise coupling values over narrow bands such as the cellular or PCS/DCN wireless bands. For wide band applications effects of the 6 dB/octave change in coupling value must be assessed. This CE-C series data sheet is designed to cover the common use of CE couplers in the cellular/GSM and PCS/DCN wireless bands.

All units are constructed from common parts, which are maintained in stock at all times, enabling rapid delivery and low production costs. With minimal solder joints and an air dielectric, the dissipative loss has been minimized and reliability enhanced. A common application is to provide a sample of a high power transmission signal for test and monitoring. A simple bracket accessory allows easy attachment to pole or wall.

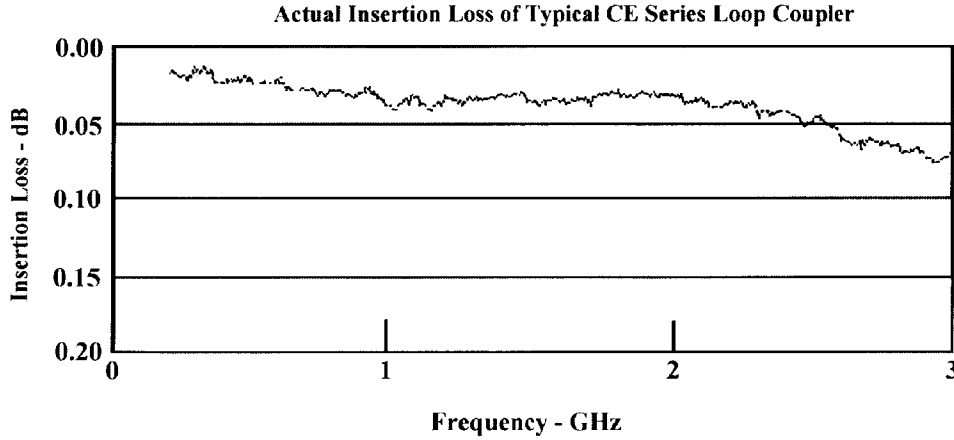
Options for different polarity or alternate connectors are available on request. (7/98)

Frequency Ranges, MHz	Cellular/GSM	PCS/DCN
Coupling:		
Standard Values	20, 30, 40 and 50 dB	
Midband Accuracy, dB	20/30/40 ± 0.25	20/30/40 ± 0.3
	50 ± 0.35 dB	50 ± 0.35 dB
Flatness (4% band)	± 0.15 dB	± 0.35 dB
Directivity:	25 dB min.	20 dB min.
Dissipative Loss:	0.05 dB max.	0.1 dB max.
VSWR:		
Main Ports	1.10:1 max.	1.25:1 max.
Coupled Ports	1.25:1 max.	1.50:1 max.
Power Handling:		
Incident	750 W avg.	500 W avg.
Reflected at 20 dB	50 W avg.	50 W avg.
Reflected at 30 dB	500 W avg.	500 W avg.
Reflected at 40/50 dB	750 W avg.	500W avg.
Peak	10 kW	
Impedance:	50Ω nominal	
Intermod. Distortion:	< -140 dBc (2 tones of +43 dBm) < -150 dBc with DIN connectors	
Temperature:	-35°C to +75°C	
Applications:	Indoor or Outdoor	
Finish, Interior:	Silverplate to QQ-S-365	
Finish, Housing:	Iridite per MIL C-5541	

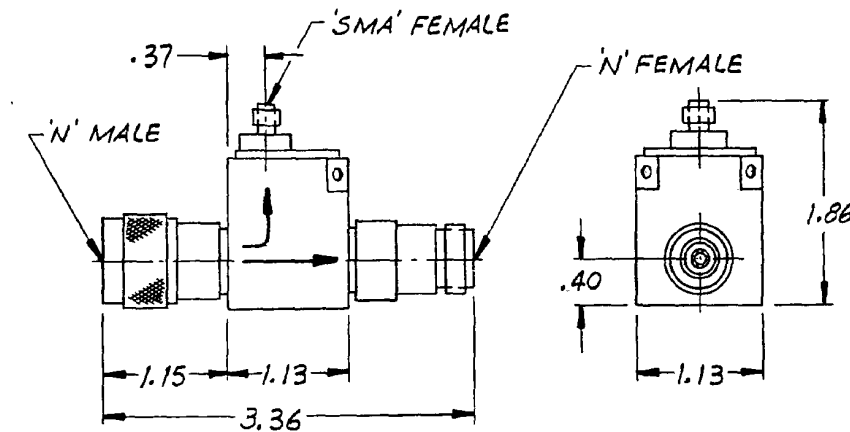
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## Insertion Loss Characteristics

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### Outline Model CE-C series with N connectors



#### Model Selection

N- connectors

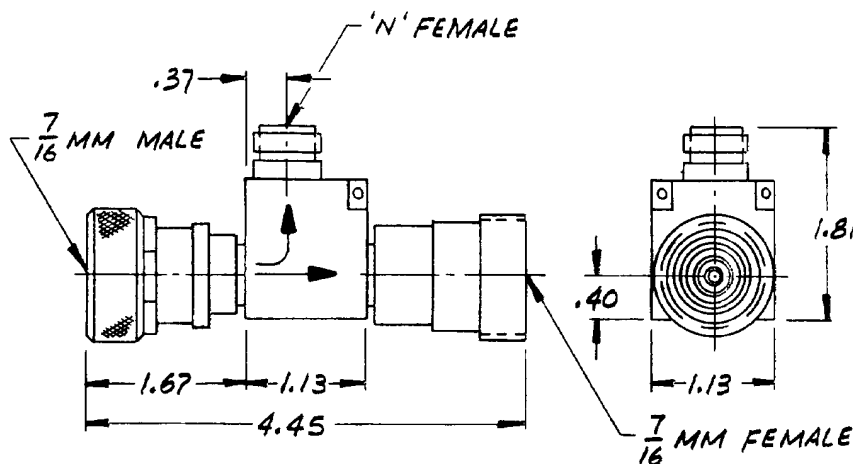
Cellular Band: 869 – 994 MHz

Coupling	Model No.
20 dB	CE-C01A
30 dB	CE-C01B
40 dB	CE-C01C
50 dB	CE-C01D

PCS Band: 1850 – 1990 MHz

Coupling	Model No.
20 dB	CE-C03A
30 dB	CE-C03B
40 dB	CE-C03C
50 dB	CE-C03D

### Outline Model CE-C series with 9-16 mm DIN connectors



#### Model Selection

7-16 mm DIN connectors

Cellular Band: 869 – 994 MHz

Coupling	Model No.
20 dB	CE-C02A
30 dB	CE-C02B
40 dB	CE-C02C
50 dB	CE-C02D

PCS Band: 1850 – 1990 MHz

Coupling	Model No.
20 dB	
30 dB	
40 dB	
50 dB	

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微波光电部专业代理经销高频、微波、光纤、光电元器件、组件、部件、模块、整机；电磁兼容元器件、材料、设备；微波 CAD、EDA 软件、开发测试仿真工具；微波、光纤仪器仪表。欢迎国外高科技微波、光纤厂商将优秀产品介绍到中国、共同开拓市场。长期大量现货专业批发高频、微波、卫星、光纤、电视、CATV 器件：晶振、VCO、连接器、PIN 开关、变容二极管、开关二极管、低噪晶体管、功率电阻及电容、放大器、功率管、MMIC、混频器、耦合器、功分器、振荡器、合成器、衰减器、滤波器、隔离器、环行器、移相器、调制解调器；光电子器件和组件：红外发射管、红外接收管、光电开关、光敏管、发光二极管和发光二极管组件、半导体激光二极管和激光器组件、光电探测器和光接收组件、光发射接收模块、光纤激光器和光放大器、光调制器、光开关、DWDM 用光发射和接收器件、用户接入系统光收发器件与模块、光纤连接器、光纤跳线/尾纤、光衰减器、光纤适配器、光隔离器、光耦合器、光环行器、光复用器/转换器；无线收发芯片和模组、蓝牙芯片和模组。

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