



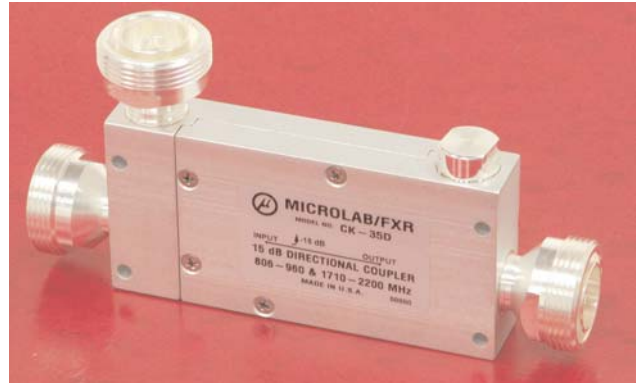
MICROLAB/FXR Directional Coupler

CK-30D series

Quarter Wave Air-line Coupler

806-960/1710-2200 MHz

- ◆ 6, 10, 15, 20 & 30 dB Coupling Values
- ◆ High Directivity/Isolation
- ◆ Low VSWR and Loss
- ◆ Dual Band Cellular and PCS/UMTS
- ◆ 200 Watt Average Power Rating
- ◆ High Reliability, Low PIM
- ◆ RoHS Compliant
- ◆ 7-16 mm DIN connectors standard



Microlab/FXR CK-30D series, Directional Couplers, is a quarter wave, air-line design for indoor and outdoor applications covering all cellular bands to 2200 MHz. Units couple off a defined fraction of signal with minimal reflections or loss.

The wide frequency range allows use with multiband antennas, leaky cable systems and in wireless base stations. With minimal solder joints and an air dielectric, the dissipative loss has been minimized and reliability enhanced. Optional units with 4 port configuration, to IP65 and with combinations of DIN and N, male and female connectors.

See also DK series, Unequal Power Splitters, for different benefits. (12/06)

Frequency Ranges:	806 to 960 MHz and 1710 to 2200 MHz
VSWR:	1.20:1 max., all ports
Dissipative Loss:	0.1 dB max. (Main Line)
Power Handling:	200 W avg., 3 kW peak*
Directivity:	25 dB min., < 1990 MHz 23 dB min., > 1990 MHz
Impedance:	50Ω nominal
Intermodulation, PIM:	< -140 dBc max. with 2 tones of +43 dBm. Lower levels to special order.
Environment:	IP64, -35°C to +75°C
Attachment Bracket:	1 supplied (2 on request)
Finish/Connectors:	Conversion/Silver or triplate

*Power may also be limited by feeding into poorly matched loads overloading the internal 2W termination.

Model Number		Coupling Loss nom.	Coupled Loss	Coupling, (ref. Input)			Weight oz (g)	Dimensions in inches (mm)			
3 port	4 port			Actual Coupling, dB, in range				A	B	C	D
				806 - 960	1710 - 1990	1990 - 2200					
CK-36D	CK-36LD	6 dB	1.26 dB	6.8 ± 0.8	5.4 ± 0.6	6.4 ± 0.8	12	3.57	3.87	5.62	0.85
CK-37D	CK-37LD	10 dB	0.454 dB	10.8 ± 0.8	9.4 ± 0.7	10.4 ± 0.8	(330)	(90.7)	(98.3)	(143)	(21.6)
CK-35D	CK-35LD	15 dB	0.140 dB	15.5 ± 0.9	14.0 ± 0.8	15.1 ± 1.0	12 (330)	3.79 (96.3)	4.09 (104)	5.83 (148)	0.73 (18.5)
CK-38D	CK-38LD	20 dB	0.045 dB	20.8 ± 0.9	19.4 ± 0.8	20.4 ± 1.0					
CK-39D	CK-39LD	30 dB	0.004 dB	30.8 ± 1.0	29.4 ± 1.0	30.4 ± 1.3					

