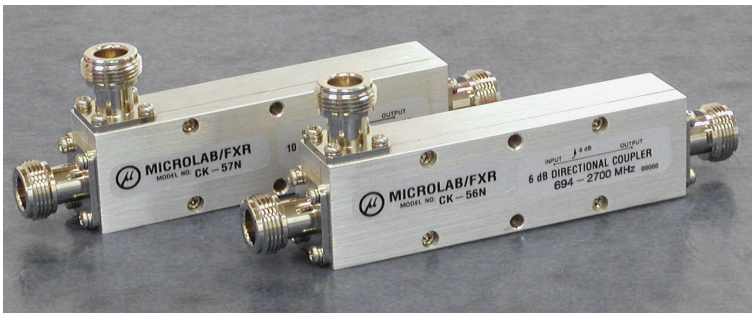
Directional Coupler, CK-50N series

Dual Section, Wideband, Microstrip Coupler
694 - 2700 MHz, N connectors
Rev. B

$ Saver Product Line

- 5 to 30 dB Coupling Values
- Good Directivity VSWR & Loss
- Wideband Cellular to WiMAX
- 50 Watt Average Power
- RoHS Compliant
- Effective as Tappers for DAS In-Building Systems



Microlab CK-50N series of N type Directional Couplers, is a multi section, quarter wave, microstrip design for indoor applications covering all wireless bands from 694 to 2,700 MHz. Units couple off a defined fraction of signal from 5 to 20 dB with minimal reflections or loss.

The wide frequency range allows use with multiband antennas and 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.

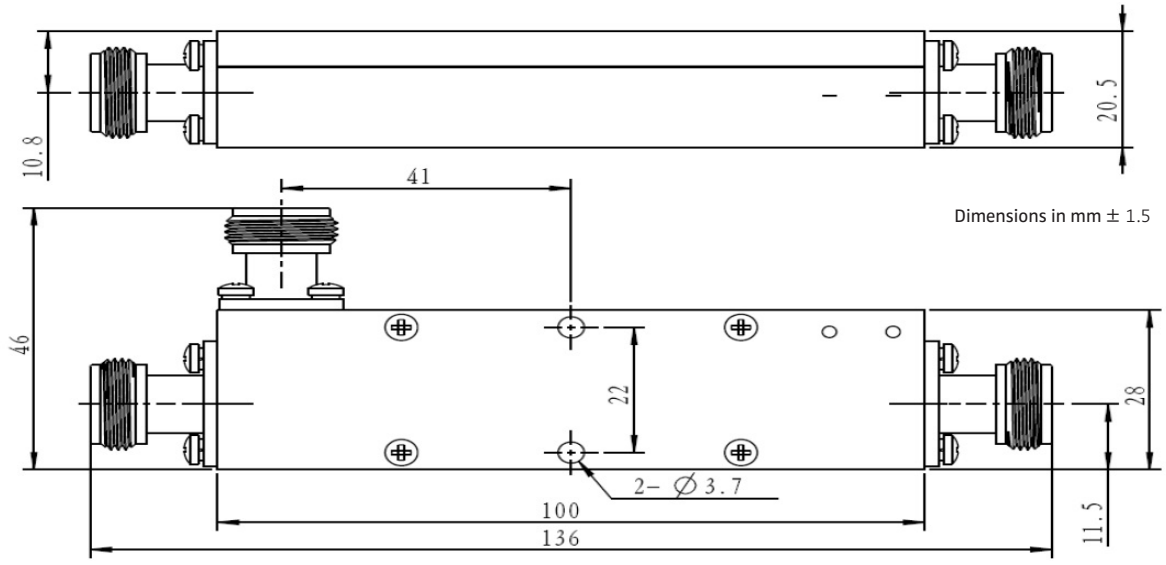
These Directional Couplers may also be used as Unequal Dividers or Tappers, which are usually specified by the power ratio between outputs. For convenience these are shown in the table.

Model Number	Coupling dB nom.	Flatness dB	Coupled Loss, dB	Dissipative Loss, dB	*Power Ratio/dB between Outputs	
CK-51N	5 ± 0.6	± 0.3	1.65	<0.6	7:3	3.35 dB
CK-56N	6 ± 0.6	± 0.3	1.25	<0.6	3:1	4.75 dB
CK-52N	7 ± 0.8	± 0.4	0.97	<0.6	4:1	6.00 dB
CK-57N	10 ± 0.8	± 0.5	0.45	<0.6	9:1	9.55 dB
CK-53N	13 ± 0.9	± 0.6	0.21	<0.6	20:1	13.0 dB
CK-54N	15 ± 0.9	± 0.6	0.140	<0.6	30:1	14.7 dB
CK-58N	20 ± 0.9	± 0.6	0.045	<0.6	100:1	19.9 dB
CK-59N	30 ± 1.0	± 0.6	0.004	<0.6	1000:1	30.0 dB

8 dB and other coupling values available to special order.
*Power Ratio/dB between outputs is approximate

Frequency Range:	694 to 2,700 MHz
Directivity:	19 dB minimum
Input VSWR:	<1.25:1
Power Handling:	50W avg.*
Impedance:	50Ω nominal
Environment:	-20° - +70°C, Indoor
Finish:	Passivated aluminum
Weight:	7.5 oz., 210 g nom.
Connectors:	N (f), triplate
Mounting:	Optional Kit to order

*Power may also be limited by feeding into poorly matched loads overloading the internal 1W termination.



Dimensions in mm ± 1.5

Note: Specifications are subject to change without prior notification.

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Microlab, A Wireless Telecom Group Company, 25 Eastmans Road, Parsippany, NJ 07054
Tel: (973) 386-9696 • sales@microlab.fxr.com • www.microlab.fxr.com • Fax: (973) 386-9191