Directional Coupler, CK-10 series

Ultra-wideband, Low-loss Stripline Coupler
3 or 4 port, 694 - 3,600 MHz
Rev. F

- Ultra wide-band, taper design
- Models for Outdoor Environment
- 6, 10, 15, 20 & 30 dB Values
- Minimal RF Insertion Loss
- Low Specified PIM
- 200 Watt Average Main Line Power
- 4.1-9.5, 7-16, 4.3-10 or N Connectors
- Includes Mounting Bracket (Not shown)

The CK-10 series of Directional Couplers is a tapered stripline design covering from 694 to 3,600 MHz. Units couple off a defined fraction of signal with minimal reflections or loss. Each model is available as a 4 port coupler.

The extremely wide frequency range allows use with multiband antennas, leaky cable systems and wireless base stations. With minimal solder joints and a low loss dielectric, the dissipative loss has been minimized and reliability enhanced. Mounting brackets are included.

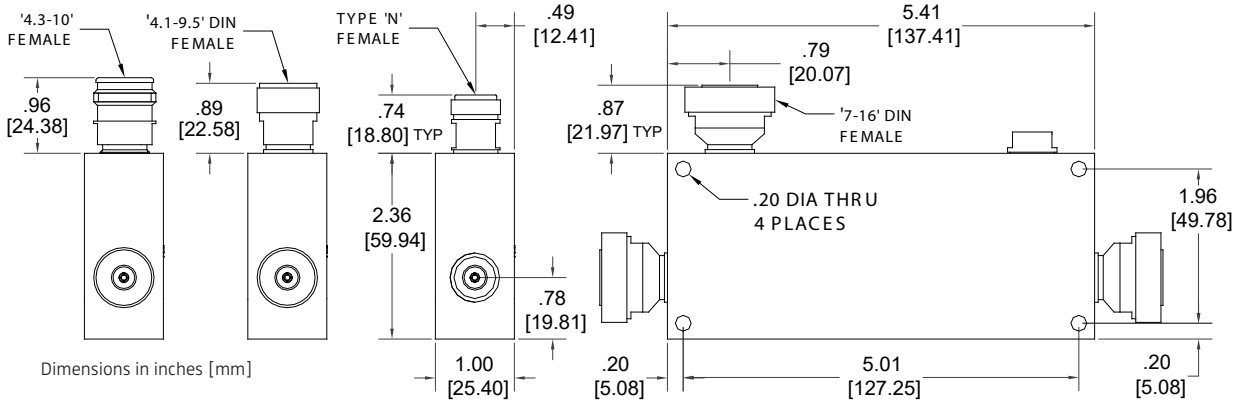
Four port directional couplers are available with LC, LD, LE or LN suffix, (e.g. **CK-16LN)**. For outdoor environments add suffix 'P' to Model No. (e.g. **CK-16NP**).

Frequency:	694-3600 MHz
VSWR	1.20:1 max., 694-2500 MHz 1.25:1 max., 2500-3300 MHz 1.40:1 max., 3300-3600 MHz
Intermod., PIM:	-161 dBc (2 tones at +43 dBm)
Power Rating:	200 W avg., 1.5 kW pk*
Directivity:	20 dB min., 694-2500 MHz 18 dB min., 2500-3300 MHz 16 dB min., 3300-3600 MHz
Impedance:	50Ω nominal
Environment:	0°C to +50°C,below 0°C coupling is maintained but directivity degrades
Housing Finish:	RoHS Compliant
Indoor/IP64:	Standard model, Passivated Al.
Outdoor/IP67:	Adds paint (Add P to Model No.)
Connectors:	Triplate
Weight: 7-16 DIN	26 oz, 0.75 kg, nominal
4.1-9.5, 4.3-10 & N-type	24 oz, 0.67 kg, nominal

*Power may be limited by feeding into poorly matched loads overloading the termination.

3 Port Model Numbers*				Coupling	Frequency Sensitivity		Coupled	Dissapative
4.1-9.5†	7-16	N Type	4.3-10	nom.	694-2500 MHz	2500-3600 MHz	Loss	Loss, dB
CK-15C	**CK-15D**	**CK-15N**	**CK-15E**	15 dB	+1.2/-0.8 dB	+1.2/-0.8 dB	0.14 dB	<0.30
CK-16C	**CK-16D**	**CK-16N**	**CK-16E**	6 dB	±0.75 dB	±0.9 dB	1.26 dB	<0.30
CK-17C	**CK-17D**	**CK-17N**	**CK-17E**	10 dB	±1.0 dB	±1.0 dB	0.45 dB	<0.30
CK-18C	**CK-18D**	**CK-18N**	**CK-18E**	20 dB	±1.0 dB	±1.0 dB	0.04 dB	<0.30
CK-19C	**CK-19D**	**CK-19N**	**CK-19E**	30 dB	±1.0 dB	±1.2 dB	0.01 dB	<0.30

*4 Port models are available with LC, LD, LE or LN suffix. Add 'P' to Model Number for Outdoor Finish.
†"Mini-DIN" Connector



Dimensions in inches [mm]

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