



MICROLAB/FXR Directional Coupler

CK-10 series

Ultra-wideband, Low-loss Stripline Coupler
3 or 4 port, 700 - 2,700 MHz, 7-16 DIN or N

- ◆ Ultra wide-band, taper design
- ◆ Flat response 700 to 2700 MHz
- ◆ 6, 10, 20 & 30 dB Values
- ◆ Minimal RF Insertion Loss
- ◆ Rugged, High Reliability
- ◆ Low Passive Intermodulation (PIM)
- ◆ 200 Watt Average Main Line Power
- ◆ 7-16 mm DIN or N Connectors



CK-18D
6 dB Directional Coupler

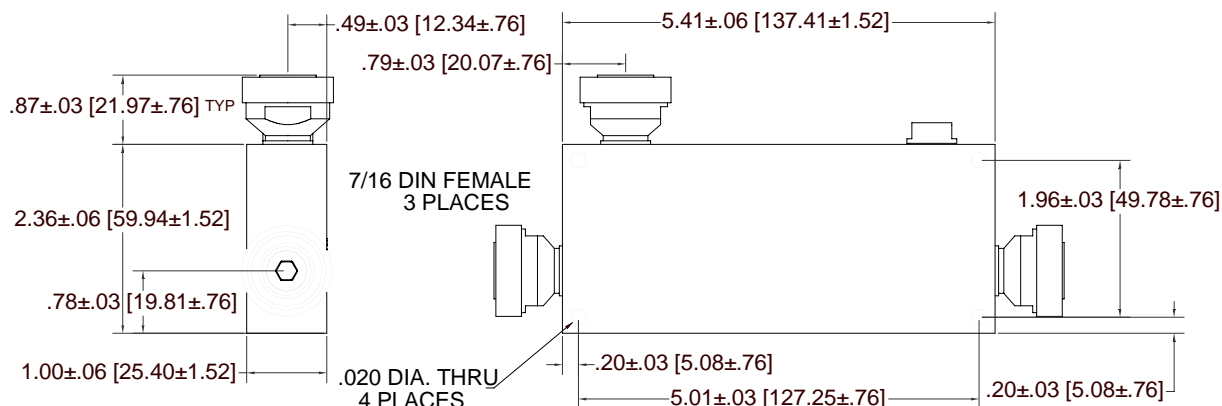
The CK-10 series of Directional Couplers is a tapered stripline design for indoor applications covering from 700 to 2,700 MHz (close to specification from 500 to 3,000 MHz). Units couple off a defined fraction of signal with minimal reflections or loss. Each model is available with or without an internal 4th. port termination.

The extremely wide frequency range allows use with multiband antennas and 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. See also DK series, Unequal Power Splitters, which offer alternate benefits for some in-building applications. (11/06)

Frequency Range: 700 to 2,700 MHz
VSWR, all ports: 1.20:1 max.
Power Rating: 200 W avg., 1.5 kW pk*
Directivity: 20 dB min.
Impedance: 50Ω nominal
Intermod., PIM: <-140 dBc, 2 x +43 dBm
Environment: 0°C to +50°C, IP65
below 0°C coupling is maintained but directivity falls
Finish: Body: Passivated Aluminum
Connectors: N or 7-16 mm (f)
silver or triplate

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

7-16 mm DIN Models		N Models		Coupling nom.	Frequency Sensitivity	Coupled Loss	Insertion Loss, dB	Weight oz (kg)	
3 Port	4 Port	3 Port	4 Port					DIN	N
CK-16D	CK-16LD	CK-16N	CK-16LN	6 dB	±0.75 dB	1.26 dB	<0.25	26 (0.75)	24 (0.67)
CK-17D	CK-17LD	CK-17N	CK-17LN	10 dB	±1.0 dB	0.45 dB	<0.20	26 (0.75)	24 (0.67)
CK-18D	CK-18LD	CK-18N	CK-18LN	20 dB	±1.0 dB	0.04 dB	<0.20	26 (0.75)	24 (0.67)
CK-19D	CK-19LD	CK-19N	CK-19LN	30 dB	±1.0 dB	0.01 dB	<0.20	26 (0.75)	24 (0.67)



Note: N connector outline identical, except height of connector which is 0.75 (19).
3 port model shown. In 4 port, load is replaced by connector.

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