Directional Coupler, CK-10 series

Ultra-wideband, Low-loss Stripline Coupler
3 port, 617 - 3,800 MHz
Rev. K

- Extended bandwidth for CBRS and Band43 applications
- Range of Coupling Values
- Minimal RF Insertion Loss
- Guaranteed Low PIM
- 200 Watt Average Main Line Power
- 7-16, 4.3-10 or N Connectors
- RoHS Compliant



The CK-10 series of Directional Couplers is a tapered stripline design covering from 617 to 3,800 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 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.

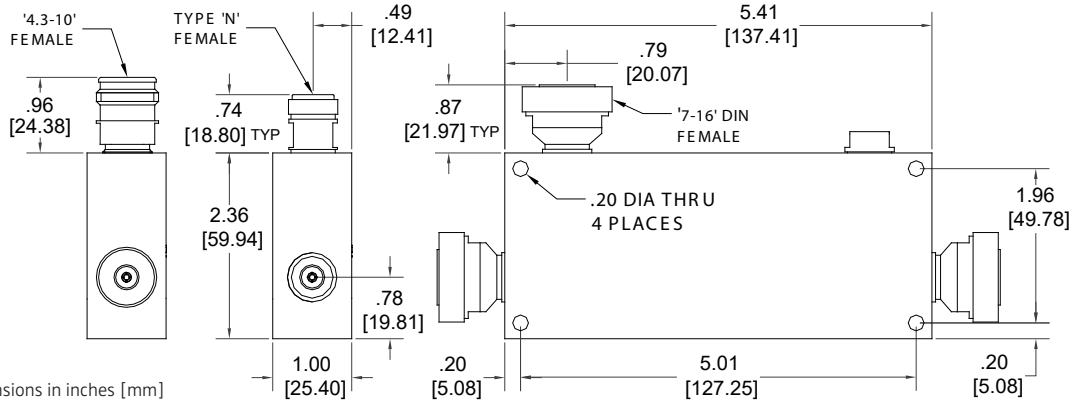
Four port directional couplers are available for 4.3-10 connector 6 and 10 dB coupling value(Eg CK-16LE). See CK-10K product series for salt-fog rated directional couplers.

Frequency:	617-3800 MHz **(all except CK-19)**
VSWR	1.20:1 max., 617-2500 MHz 1.25:1 max., 2500-3300 MHz 1.40:1 max., 3300-3600 MHz 1.45:1 max., 3600-3800 MHz
PIM:	-161 dBc (-118 dBm) (2 tones at +43 dBm)
Power:	200 W avg., 1.5 kW pk*
Directivity:	20 dB min., 617-2500 MHz 18 dB min., 2500-3300 MHz 16 dB min., 3300-3600 MHz 14 dB min., 3600-3800 MHz
Impedance:	50Ω nominal
Environment:	0°C to +50°C, IP64 below 0°C coupling is maintained but directivity degrades
Housing Finish:	Passivated Al.
Connectors:	Triplate
Weight: 7-16 DIN	26 oz, 0.75 kg, nominal
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 (MHz)				Coupled
7-16	N Type	4.3-10	nom.	617-694	694-2500	2500-3600	3600-3800	Loss
-	-	**CK-13E**	13 dB	+ 1.3/-1.0 dB	+1.0 dB	+1.0/-1.3dB	+1.0/-1.5dB	0.22dB
CK-15D	**CK-15N**	**CK-15E**	15 dB	+1.5/-0.8 dB	+1.2/-0.8 dB	+1.2/-0.8dB	+1.7/-1.3dB	0.14dB
CK-16D	**CK-16N**	**CK-16E**	6 dB	+1.0/-.75 dB	±0.75 dB	±0.9dB	+1.4dB	1.26dB
CK-17D	**CK-17N**	**CK-17E**	10 dB	+1.3/-1.0 dB	±1.0 dB	±1.0dB	+1.5dB	0.45dB
CK-18D	**CK-18N**	**CK-18E**	20 dB	+1.3/-1.0 dB	±1.0 dB	±1.0dB	+1.5dB	0.04dB
CK-19D†	**CK-19N†**	**CK-19E†**	30 dB	+1.3/-1.0 dB	±1.0 dB	+1.2dB	N/A	0.01dB

Dissapative Loss - <0.30dB



Dimensions in inches [mm]

Note: Specifications are subject to change without prior notification. 28MAR2019

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