

- ◆ 6, 10, 20 dB Coupling Values
- ◆ High Directivity/Isolation
- ◆ Low VSWR and Loss
- ◆ Tetra, VHF, UHF
- ◆ 100 Watt Average Power Rating
- ◆ High Reliability, Low PIM
- ◆ IP67, RoHS compliant



**CK-86N**  
**6 dB Directional Coupler**

The CK-80 series, Directional Couplers, is a multi-section quarter wave, stripline design for indoor applications covering VHF, UHF, and Tetra bands, 80 to 520 MHz. Units couple off a defined fraction of signal with minimal reflections or loss.

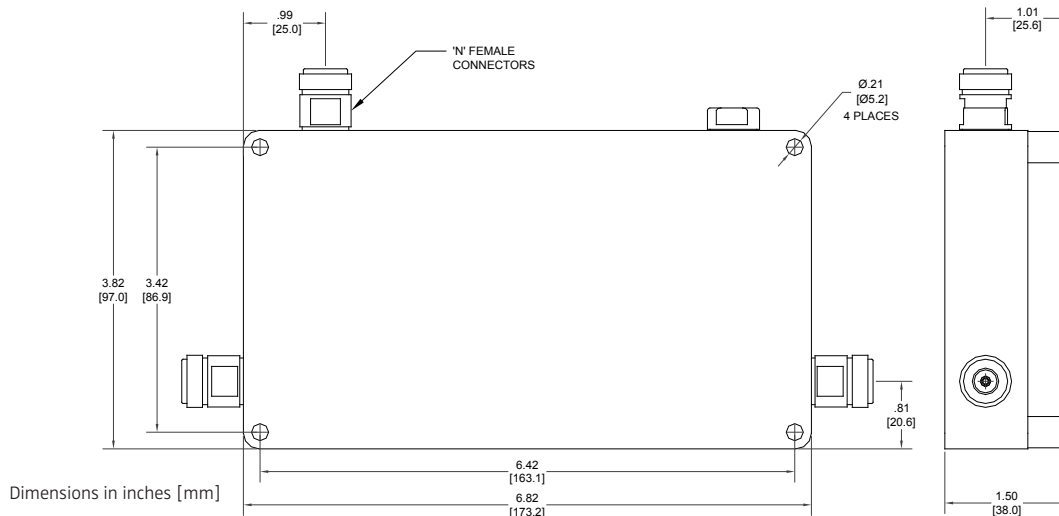
The wide frequency range allows use with multiband antennas and leaky cable systems and in wireless base stations. With few solder joints and an low loss dielectric, the dissipative loss has been minimized and reliability enhanced.

Frequency Ranges:	80 to 520 MHz
VSWR, max:	1.20:1, all ports
Power Handling:	100 W avg., 3 kW peak*
Directivity, min:	20dB at 80 - 500 MHz 18dB at 500 - 520 MHz
Impedance:	50Ω nominal
Intermodulation, PIM:	-161 dBc (2 x +43 dBm tones)
Environment:	-35°C to +75°C, IP64 (IP67 to order)
Finish: Housing:	Passivated aluminum
Connectors:	Triplate, female

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

Model Number/Conn	Coupling		Insertion	Coupling	Weight nom., oz (g)		
N Type	7-16 DIN	4.3-10	Loss*, dB max.	Flatness	N/4.3-10	7-16 DIN	
CK-86N	CK-86D	CK-86E	6.2 dB	2.40	± 1.2 dB	42.0	45.0
CK-87N	CK-87D	CK-87E	10.3 dB	1.50	± 1.3 dB	42.0	45.0
CK-88N	CK-88D	CK-88E	20.5 dB	0.80	± 1.5 dB	42.0	45.0

\* Insertion loss is a sum of coupling loss, dissipative loss and loss due to isolation and reflection.



Note: Specifications are subject to change without prior notification.

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