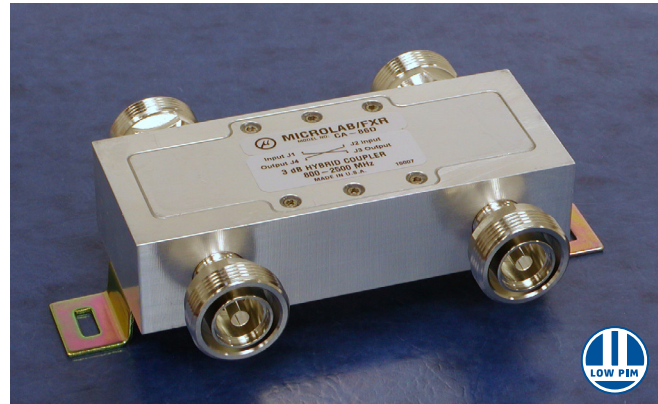




High Power Hybrid Combiner, CA-86

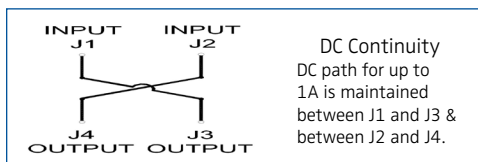
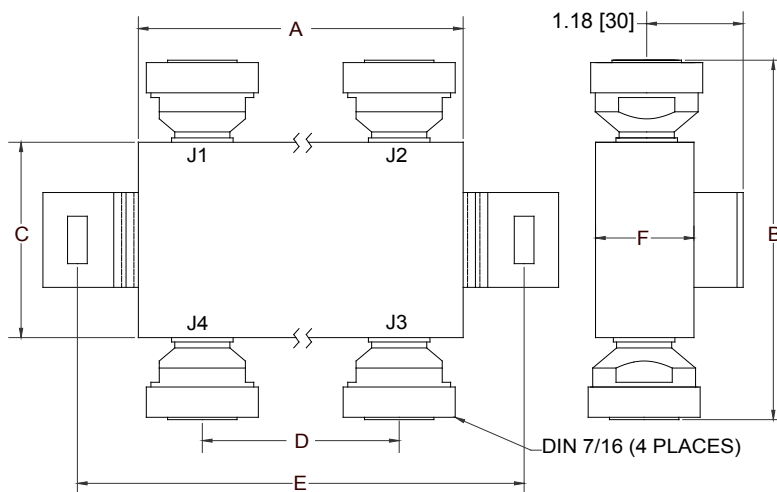
Special Low PIM Wireless Band Versions, 7-16, 4.1-9.5, and N
400W High Power Model, 698 - 2,700 MHz
Rev. C

- ◆ Guaranteed PIM performance
- ◆ **Models for Outdoor Environment**
- ◆ 400 Watt Average Power Rating
- ◆ High Isolation, Low VSWR and loss
- ◆ Multi Band Range for Cellular, PCS UMTS and LTE
- ◆ High Reliability, Moisture sealed
- ◆ Convenient connector spacing and easy mounting to pole or wall



This Hybrid Coupler has been designed to meet the special needs of the higher power needs of the wireless market. The most common use is to combine two wireless carriers in the band to a single antenna feed or distribution cable. This requires the termination of one output port in 50Ω and results in a 3 dB loss in each signal. Note that the termination used must have a return loss of at least 25 dB and PIM below -153 dBc for the isolation and PIM performance to be maintained. A high power low PIM cable load appropriate to the power dissipation, is recommended to maintain this performance. See Microlab model series TK-27.

Connectors, spaced to allow controlled wrench tightening, are available with alternate genders. Add suffix P to Model No. (e.g. CA-86NP) for outdoor environments. (7/14_1)



All dimensions ±0.60 inches unless otherwise noted. Dimensions in mm are for reference only.

Model Number	Connector	Isolation min/typ
CA-86D	7-16(f)	23/25
CA-86C	+4.1-9.5(f)	23/25
CA-86N	N(f)	20/23

† Mini-DIN Connectors
Add 'P' to Model Number for Outdoor

Frequency:	698 - 2700 MHz
Coupling:	3 dB nominal
Sensitivity:	±0.6 dB
Dissipative Loss:	0.3 dB max.
VSWR:	<1.20:1
PIM (Intermod):	-160 dBc typ, <-153 dBc guarantee (2 tone test at +43dBm)
Power Rating:	200W max/input 1.5kW peak
Impedance:	50Ω nominal
Environment:	-35 to +65°C
Housing Finish:	Indoor/IP64: Standard model Passivated Al. Outdoor/IP67: Add P to Model No. & Painted RoHS compliant
Connectors:	Triplate

Dimensions & Weight Inches (mm)/oz (g)

	CA-86D	CA-86C	CA-86N
A	5.19 [132]	5.19 [132]	5.19 [132]
B	3.89 [99]	3.94 [100]	3.64 [93]
C	2.12 [54]	2.12 [54]	2.12 [54]
D	3.33 [85]	3.33 [85]	3.33 [85]
E	5.99 [152]	5.99 [152]	5.99 [152]
F	1.25 [32]	1.25 [32]	1.25 [32]
Wt.	28 [785]	28 [785]	24 [675]