High Power Hybrid Combiner, CA-86



Special Low PIM Wireless Band Versions, 7-16, 4.3-10 & N 500W High Power Model, 694 - 2,700 MHz Rev. G

- Guaranteed PIM performance
- Models for Outdoor Environment
- 250W/Input Continuous Avg. Power
- 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



Model

Model CA-86E

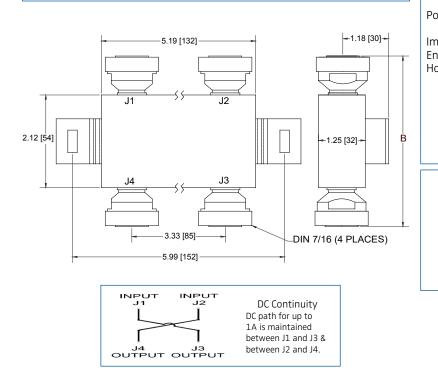
Connector

LOW PIM

Isolation

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 -161 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.



Number	com	lector	min/typ	
CA-86D	7-1	L6(f)	23/25	
CA-86E	4.3-	10(f)	23/25	
CA-86N	Ν	l(f)	20/23	
Add 'P' to Model Number for Outdoor				
Frequency:		694 - 2700 MHz		
Coupling:		3 dB nominal		
Sensitivity:		±0.6 dB		
Dissipative Loss:		0.3 dB max.		
VSWR:		<1.20:1		
PIM (Intermod):		-161 dBc		
			est at +43dBm)	
Power Rating:		250W max/input		
		1.5kW peak		
Impedance:		50 Ω nominal		
Environment:		-35 to +65°C		
Housing Fini				
Indoor/IP64:		Standard model		
		Passivated Al.		
Outdoor/IP67:		Add P to Model No.		
		& Painte	d	

RoHS compliant

Weight

28 [785]

25 [716]

24 [675]

Triplate

Dimensions & Weight

Inches (mm)/oz (g)

Dimensions in inches [mm]

Length B

3.89 [99]

4.04[103]

3.64 [93]

Note: Specifications are subject to change without prior notification.

Microlab, A Wireless Telecom Group Company, 25 Eastmans Road, Parsippany, NJ 07054 Tel: (973) 386-9696 • sales@microlabtech.com • www.microlabtech.com • Fax: (973) 386-9191

Connectors:

CA-86D

CA-86E

CA-86N