# Hybrid Coupler, CA-13 & -14 series

Ultra Wideband Low PIM Wireless Band Models
350 - 2,700 or 350 - 5,850 MHz

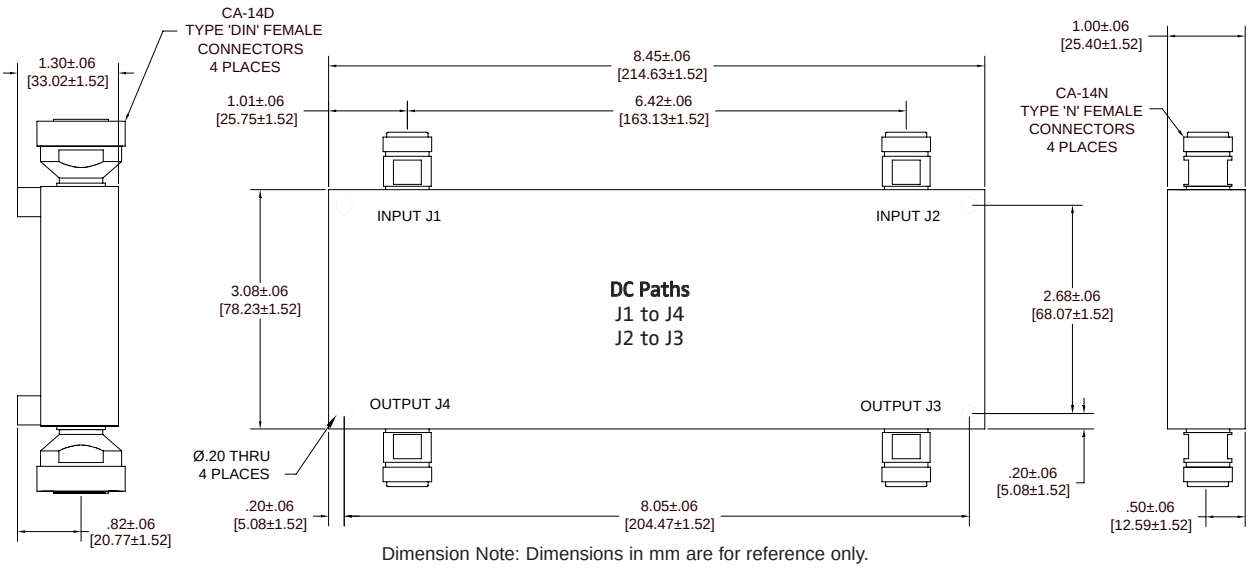
- Multi-Band Range including
- Tetra, Cellular, PCS and UMTS
- High Isolation, Low VSWR and Loss
- Guaranteed PIM performance
- 200 Watt Average Power Rating
- High Reliability, Moisture sealed
- RoHS compliant
- N or 7-16 mm DIN connectors

Microlab Model Hybrid Couplers have been designed to meet the special needs of the wireless market. They are most commonly used to combine two wireless carriers in the operating 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. In situations where two similar feeds are required, as required for an in-building application, both outputs may be used eliminating the need for a termination and the 3 dB loss. For low PIM terminations see TK-20 series.

This CA-14 series has been designed for systems requiring signal combining over all the wireless bands from 350 to 2,700 MHz, and the CA-13 extends the frequency range to 5,850 MHz. Isolation has been maximized and passive intermodulation (PIM) minimized. (08/11)

| Model Number/Conn 7-16 DIN | N-conn. | Frequency Range, MHz | Isolation dB | Coupling & Loss, dB | VSWR Max |
|---|---|---|---|---|---|
| | | 350 - 1,500 | >25 dB | 3.2 ± 0.5 | 1.20:1 |
| | | 1,500 - 2,500 | >20 dB | 3.4 ± 0.5 | 1.30:1 |
| CA-13D | CA-13N | 2,500 - 2,700 | >18 dB | 3.5 ± 0.7 | 1.50:1 |
| | | 2,700 - 4,900 | >18 dB | 3.6 ± 0.8 | 1.50:1 |
| | | 4,900 - 5,850 | >18 dB | 3.6 ± 1.0 | 1.50:1 |
| | | 350 - 1,500 | >25 dB | 3.2 ± 0.5 | 1.20:1 |
| CA-14D | CA-14N | 1,500 - 2,500 | >20 dB | 3.4 ± 0.5 | 1.30:1 |
| | | 2,500 - 2,700 | >18 dB | 3.5 ± 0.7 | 1.50:1 |

| | |
|---|---|
| Coupling: | 3 dB nominal |
| Power: | 200W avg., 3.0 kW pk |
| Impedance: | 50Ω nominal |
| Environment: | -35°C to +65°C, IP64 (IP67 to order) |
| PIM (Intermod): | <-150 dBc (+43dBm x2) <-160 dBc to order |
| Finish: Housing: | Passivated aluminum |
| Connectors: | Triplate, female |
| For Male Inputs | Revise part number suffix to MD or MN |




Dimension Note: Dimensions in mm are for reference only.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