

- ◆ Ultra wide-band to support TETRA to LAA applications
- ◆ Guaranteed Low PIM
- ◆ High Isolation and Low VSWR
- ◆ 200 Watt per Input Continuous Average Power up to 2.1 GHz<sup>†</sup>
- ◆ Meets European Rail Standard EN50155:2001 (Class T3)
- ◆ IP67 Rated
- ◆ High Reliability, RoHS compliant



CA-14E



Microlab Hybrid Couplers have been designed LAA deployments. 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 Microlab TK series.

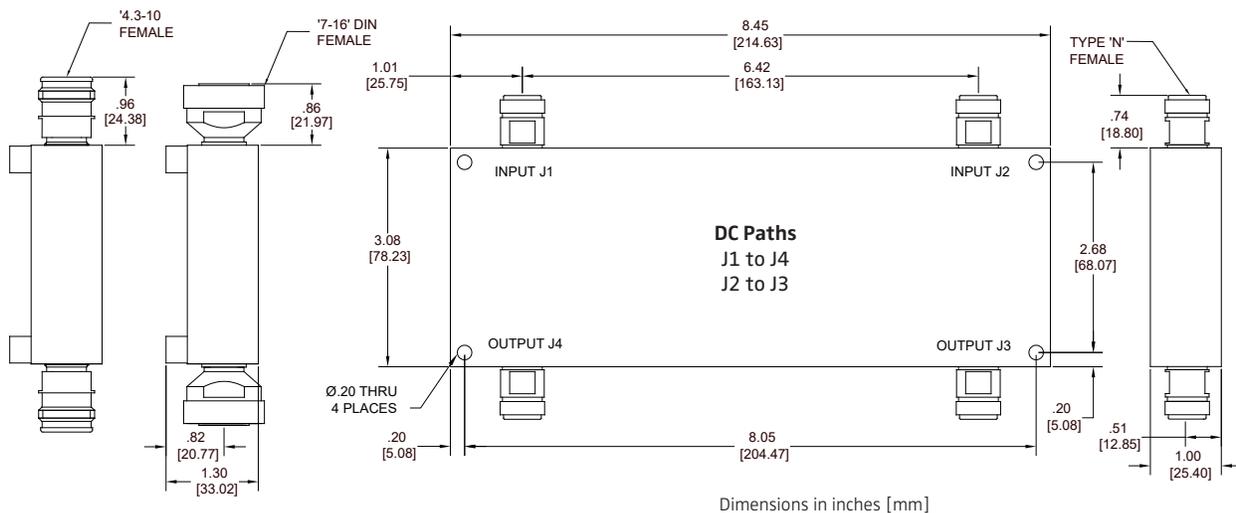
The CA-14 series has been designed for systems requiring signal combining over all the wireless bands from 350 to 5,925 MHz. Isolation has been maximized and passive intermodulation (PIM) minimized.

| Model Number/Conn | Frequency Range, MHz | Isolation dB | Coupling & Loss, dB | VSWR Max |
|-------------------|----------------------|--------------|---------------------|----------|
| 7/16 DIN          | 350 - 1,500          | >25 dB       | 3.2 ± 0.5           | 1.20:1   |
| N                 | 1,500 - 2,500        | >20 dB       | 3.4 ± 0.5           | 1.30:1   |
| 4.3-10            | 2,500 - 2,700        | >18 dB       | 3.5 ± 0.7           | 1.50:1   |
| CA-14D            | 2,700 - 4,900        | >18 dB       | 3.6 ± 0.8           | 1.50:1   |
| CA-14N            | 4,900 - 5,925        | >18 dB       | 3.6 ± 1.0           | 1.50:1   |
| CA-14E            |                      |              |                     |          |

|                  |   |
|------------------|---|
| Coupling:        | 3 dB nominal  |
| Power/Input:     | 200W up to 2.1 GHz <sup>†</sup> ,<br>3.0 kW pk  |
| Impedance:       | 50Ω nominal   |
| Environment:     | -40°C to +70°C, IP67  |
| PIM (Intermod):  | -161 dBc (-118 dBm)<br>(Tested with 2x +43dBm)  |
| Finish: Housing: | Passivated aluminum   |
| Connectors:      | Triplate, (f)   |
| Weight, nom:     | 2.65 lb., 1.20 kg   |
|                  | <sup>†</sup> De-rated by 13.3 W per 1 Ghz from 2.1 to 5.85 Ghz<br>(max 150 Watts/input at 5.85 Ghz) |

### Mechanical Outline



Note: Specifications are subject to change without prior notification.

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