

AMPS Band Microcell Duplexer

- **Passes AMPS Rx / Tx Bands**
- **High Isolation**
- **Low Insertion Loss**
- **Small Footprint**
- **Excellent Temperature Stability**



DESCRIPTION

Narda West's AMPS Band Microcell Duplexer provides highly selective receive / transmit combining. It is designed to pass the full AMPS receive and transmit bands while providing more than 50 dB isolation. The unit has a 1.0 dB maximum passband insertion loss with

0.75 dB typical. Specifically designed for high power applications, this duplexer has power ratings of 20 watts CW, 200 watts peak, with multi-carrier powers of 10 carriers at 2 watts each. It is provided with both Type 'N' and SMA female connectors.

SPECIFICATIONS

| | |
|---|---|
| MODEL NUMBER | AFD-21A-8289-30 |
| PASSBAND RECEIVE TRANSMIT | 824 - 849 MHz 869 - 894 MHz |
| PASSBAND INSERTION LOSS | 1.0 dB MAX |
| PASSBAND LOSS VARIATION | 0.4 dB MAX |
| PASSBAND RETURN LOSS | 14 dB MIN |
| ISOLATION RECEIVE TO TRANSMIT TRANSMIT TO RECEIVE | 50 dB MIN 50 dB MIN |
| POWER HANDLING ¹ CW PEAK MULTI CARRIER ² | 20 W 200 W 10 @ 2 W |
| OPERATING TEMP | 0 TO +65°C |
| STORAGE TEMP | -20 TO +85°C |
| CONNECTORS | TYPE 'N' FEMALE Rx/Tx: SMA FEMALE |
| SIZE | 8.50" x 2.53" x 2.4" 215.9 mm x 64.4 mm x 61.1 mm |

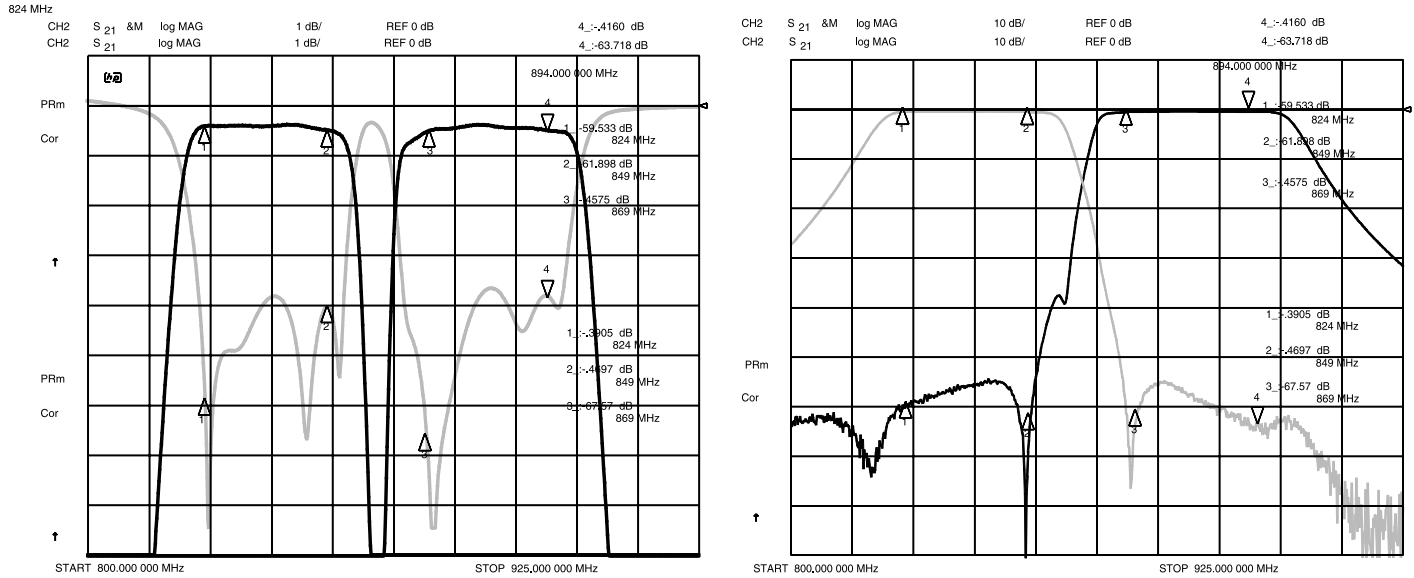
NOTES:

¹Power handling (max watts) includes simultaneous conditions of antenna VSWR $\leq 2:1$, altitude $\leq 10,000$ feet, and case temperature of $\leq +50^\circ\text{C}$.

²MULTIPLE CARRIER is defined as the number of carriers, n each at SEPARATE frequencies within the transmit passband applied simultaneously at the power level, p as indicated, completing the formula:

$$n^2 \times p = \text{Peak Power Handling.}$$

TYPICAL MEASURED DATA



OUTLINE DRAWING

