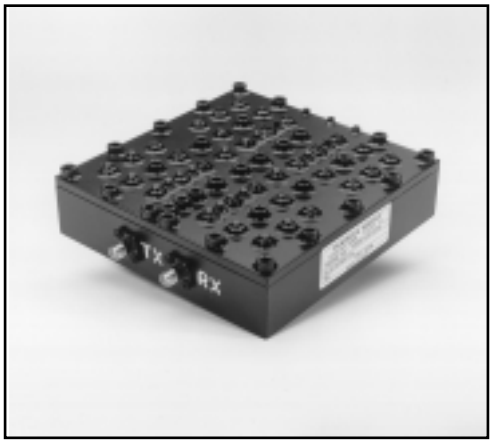
# PCS Band Duplexer

- ***Passes PCS Receive / Transmit Bands***
- ***High Isolation***
- ***Low Insertion Loss***
- ***Small Footprint***
- ***Excellent Temperature Stability***




## DESCRIPTION

Narda's PCS Band Duplexer provides highly selective receive / transmit combining. It is designed to pass the full PCS receive and transmit bands while providing more than 60 dB isolation. Out-of-band rejection is 60 dB minimum from DC to 1825 MHz and 55 dB from 2015 to 4000 MHz. This duplexer has a 1.0 dB maximum passband insertion loss with 0.7 dB typical. Power ratings are 100 watts CW, 400 watts peak, with multi-carrier powers of 6 carriers at 10 watts each. Passband return loss is specified at 14 dB maximum. The unit is provided with SMA female connectors. Type 'N' connectors are available as an option.

## SPECIFICATIONS

| MODEL NUMBER | SFD-01A-1819-09 |
|---|---|
| PASSBAND<br>RECEIVE<br>TRANSMIT | <br>1850 - 1910 MHz<br>1930 - 1990 MHz |
| PASSBAND INSERTION LOSS | 1.0 dB MAX |
| PASSBAND LOSS VARIATION | 0.6 dB MAX |
| PASSBAND RETURN LOSS | 14 dB MIN |
| REJECTION<br>ANTENNA TO RECEIVE DC - 1825 MHz<br>TRANSMIT TO ANTENNA 2015 - 4000 MHz | <br>60 dB MIN<br>55 dB MIN |
| ISOLATION<br>RECEIVE TO TRANSMIT<br>TRANSMIT TO RECEIVE | <br>60 dB MIN<br>60 dB MIN |
| POWER HANDLING[1]<br>CW<br>PEAK<br>MULTI CARRIER[2] | <br>100 W<br>400 W<br>6 @ 10 W |
| MONITOR PORT | N/A |
| OPERATING TEMP | 0 TO +65°C |
| STORAGE TEMP | -20 TO +85°C |
| CONNECTORS | SMA FEMALE |
| SIZE | 4.8 x 4.65 x 1.38"<br>121.9 x 118.1 x 35.1 mm |

AVAILABLE FROM STOCK

**NOTES:**

[1]Power handling (max watts) includes simultaneous conditions of antenna VSWR ≤ 2:1, altitude ≤10,000 feet, and case temperature of ≤+50°C.

[2]MULTIPLE 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:

**$n^2 \times p$ = Peak Power Handling.**

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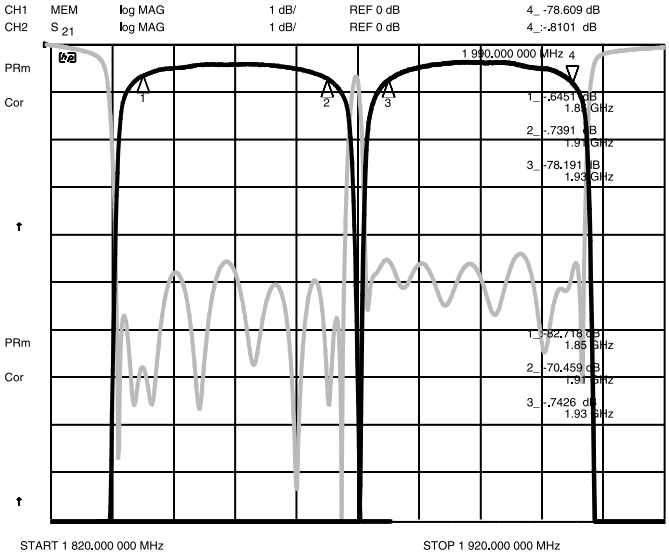
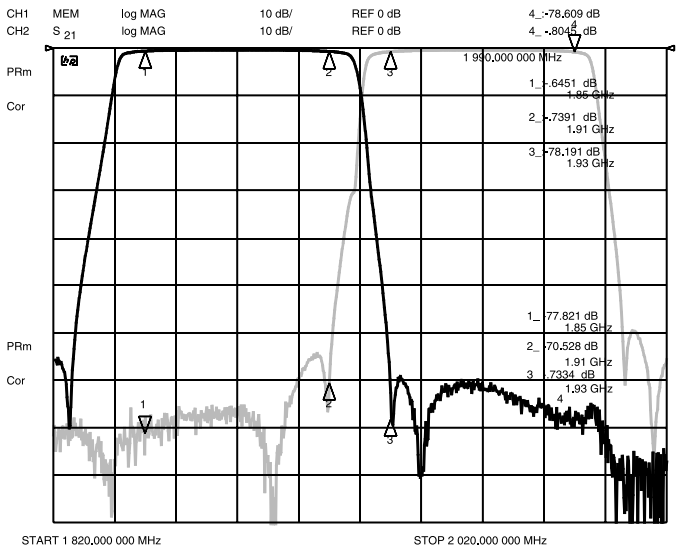
## TYPICAL MEASURED DATA




## OUTLINE DRAWING