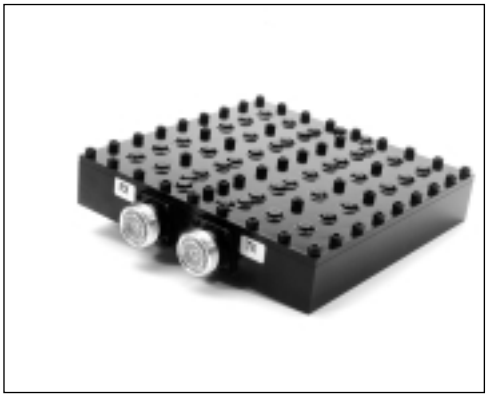
PCS Band High Power Duplexer

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



DESCRIPTION

Narda West's High Power PCS Duplexer provides extremely selective receive / transmit combining. These duplexers are 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. The units have a 1.0 dB maximum passband insertion loss with 0.7 dB typical. Power ratings are 250 watts continuous duty, 750 watts peak and multi-carrier powers of 8 carriers at 12 watts each. Passband return loss is specified at 14 dB minimum. The unit is provided with DIN 7/16 female connectors. The SFD-41A-1819-03 adds an Intermod performance specification of –110 dBm with two +44 dBm tones applied.

SPECIFICATIONS

MODEL NUMBER	SFD-41A-1819-02 (-03 Low Intermod)
PASSBAND **RECEIVE** **TRANSMIT**	 1850 - 1910 MHz 1930 - 1990 MHz
PASSBAND INSERTION LOSS	1.0 dB MAX
PASSBAND LOSS VARIATION	0.4 dB MAX
PASSBAND RETURN LOSS	14 dB MIN
REJECTION **ANTENNA TO RECEIVE DC - 1825 MHz** **TRANSMIT TO ANTENNA 2015 - 4000 MHz**	 60 dB MIN 55 dB MIN
ISOLATION **RECEIVE TO TRANSMIT** **TRANSMIT TO RECEIVE**	 60 dB MIN 60 dB MIN
POWER HANDLING[1] **CW** **PEAK** **MULTI CARRIER[2]**	 250 W 750 W 8 @ 12W
INTERMOD DISTORTION[3]	-110 dBm (-03 ONLY)
OPERATING TEMP	0 TO +65° C
STORAGE TEMP	-20 TO +85° C
CONNECTORS	7/16 DIN FEMALE
SIZE	8.00 x 8.00 x 1.50" 203 x 203 x 38.1 mm

AVAILABLE FROM STOCK

NOTES:

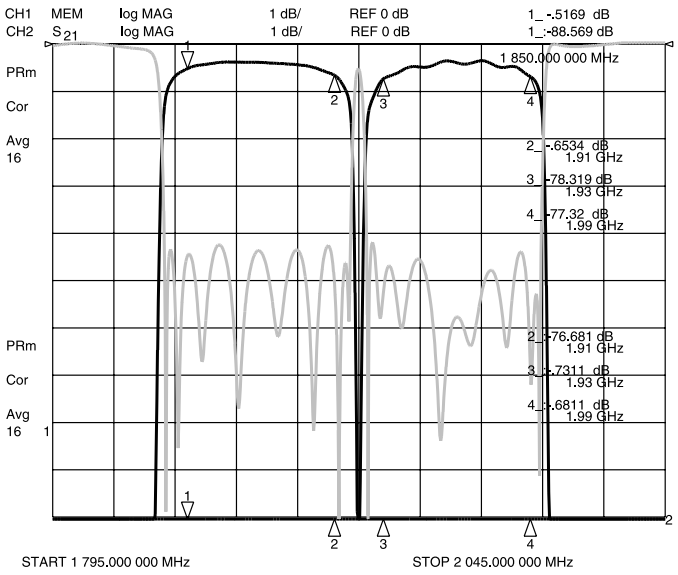
[1]Power handling (max watts) includes simultaneous conditions of Antenna VSWR ≤2:1, altitude ≤10,000 feet, and case temperature of ≤+50°C.

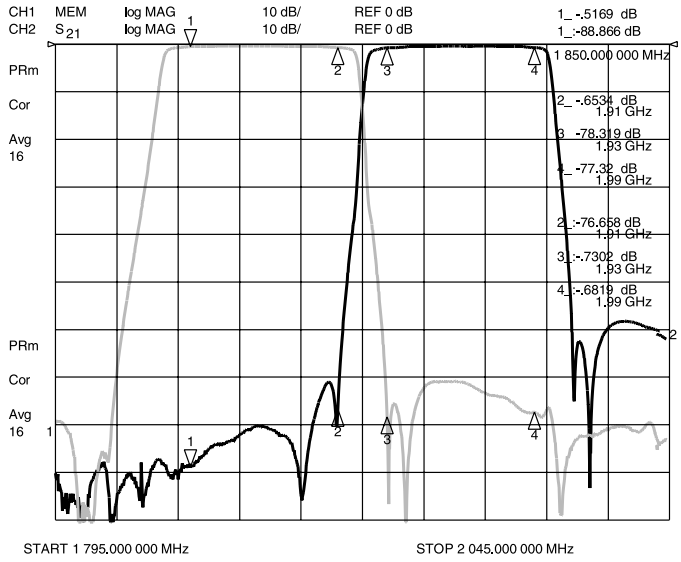
[2]MULTIPLE CARRIER is defined as the number of carriers, *n* each at SEPARATE frequencies within the transmit passband applied simultaneously at the power level, *p* as indicated, completing the formula: **$n^2 \times p$ = Peak Power Handling**.

[3]With two +44 dBm tones applied

107 WOODMERE ROAD • FOLSOM, CA 95630
TEL: (1) 916 351-4500 • FAX (1) 916 351-4550
E-MAIL: nardawest@L-3COM.com • www.nardamicrowave.com

TYPICAL MEASURED DATA





OUTLINE DRAWING