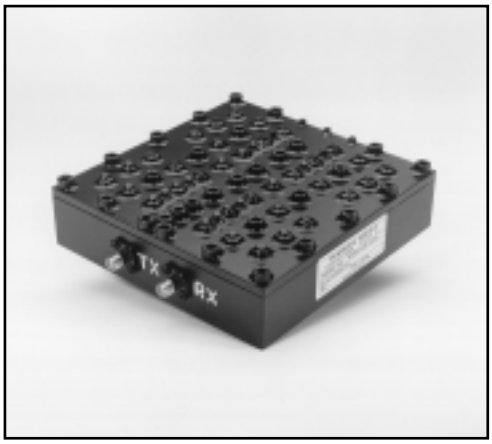
GSM-1800 Band Duplexer



- ***Passes GSM-1800 Receive / Transmit Bands***
- ***High Isolation***
- ***Low Insertion Loss***
- ***Small Footprint***
- ***Excellent Temperature Stability***

DESCRIPTION

Narda West's GSM-1800 Band Duplexer provides highly selective receive / transmit combining. This duplexer is designed to pass the full GSM-1800 receive and transmit bands while providing more than 60 dB isolation. Out-of-band rejection is 60 dB minimum from DC to 1680 MHz and 60 dB from 1910 to 4000 MHz. It 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.

SPECIFICATIONS

MODEL NUMBER	DFD-01A-1718-01
PASSBAND	
RECEIVE	1710 - 1785 MHz
TRANSMIT	1805 - 1880 MHz
PASSBAND INSERTION LOSS	1.0 dB MAX
PASSBAND LOSS VARIATION	0.6 dB MAX
PASSBAND RETURN LOSS	14 dB MIN
REJECTION	
ANTENNA TO RECEIVE DC - 1680 MHz	60 dB MIN
TRANSMIT TO ANTENNA 1910 - 4000 MHz	60 dB MIN
ISOLATION	
RECEIVE TO TRANSMIT	60 dB MIN
TRANSMIT TO RECEIVE	60 dB MIN
POWER HANDLING[1]	
CW	100 W
PEAK	400 W
MULTI CARRIER[2]	6 @ 10 W
OPERATING TEMP	0 TO +65°C
STORAGE TEMP	-20 TO +85°C
CONNECTORS	SMA FEMALE
SIZE	4.8 x 4.65 x 1.38" 121.9 x 118.1 x 35.1 mm

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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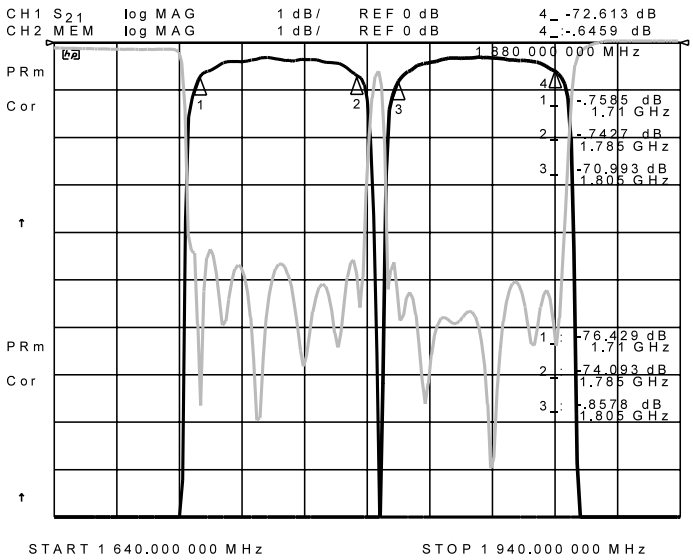
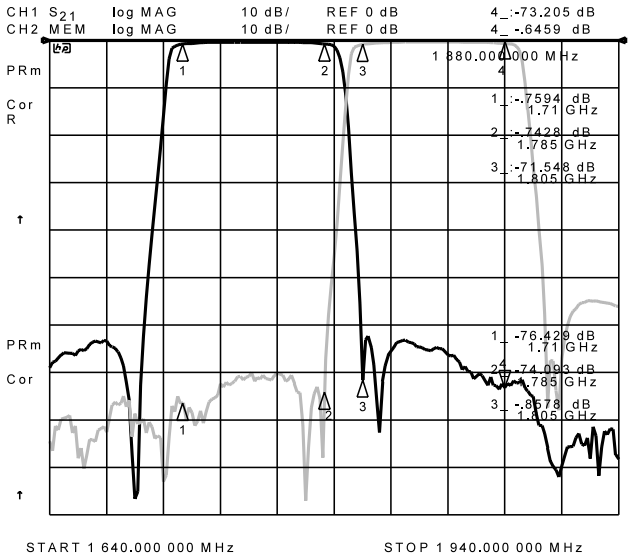
TYPICAL MEASURED DATA





OUTLINE DRAWING