

GSM Band Duplexer

- **Passes Full GSM Band Rx / Tx**
- **High Isolation**
- **Low Insertion Loss**
- **Standard EIA Rack Mountable**
- **Optional Monitor Port**



DESCRIPTION

Narda's GSM band Duplexers provide highly selective receive / transmit combining. These duplexers are designed to pass the full GSM receive and transmit bands while providing more than 75 dB isolation. The units have a 0.75 dB maximum passband insertion loss with 0.5 dB typical. Specifically designed for high power applications, power ratings are 400 watts CW, 600 watts peak, with

multi-carrier powers of 8 carriers at 10 watts each. An optional monitor port which offers a -50 dB coupled signal for power monitoring is available on the GFD-21A-8289-02. This unit is provided with Type 'N' female connectors. 7/16 DIN connectors available as an option (shown).

SPECIFICATIONS

MODEL NUMBER	GFD-21A-8996-01 / -02 (MONITOR PORT)
PASSBAND RECEIVE TRANSMIT	890 - 915 MHz 935 - 960 MHz
PASSBAND INSERTION LOSS	0.75 dB MAX
PASSBAND LOSS VARIATION	0.4 dB MAX
PASSBAND RETURN LOSS	14 dB MIN
REJECTION ANTENNA TO RECEIVE DC - 768 MHz TRANSMIT TO ANTENNA 1500 - 2700 MHz	65 dB MIN 65 dB MIN
ISOLATION RECEIVE TO TRANSMIT TRANSMIT TO RECEIVE	75 dB MIN 75 dB MIN
POWER HANDLING ¹ CW PEAK MULTI CARRIER ²	400 W 600 W 8 @ 10 W
MONITOR PORT	50 ±5 dB (-02 ONLY)
OPERATING TEMP	0 TO +65°C
STORAGE TEMP	-20 TO +85°C
CONNECTORS	TYPE 'N' FEMALE
SIZE	19" x 2.49" x 2U 482.6 mm x 63.2 mm x 2U

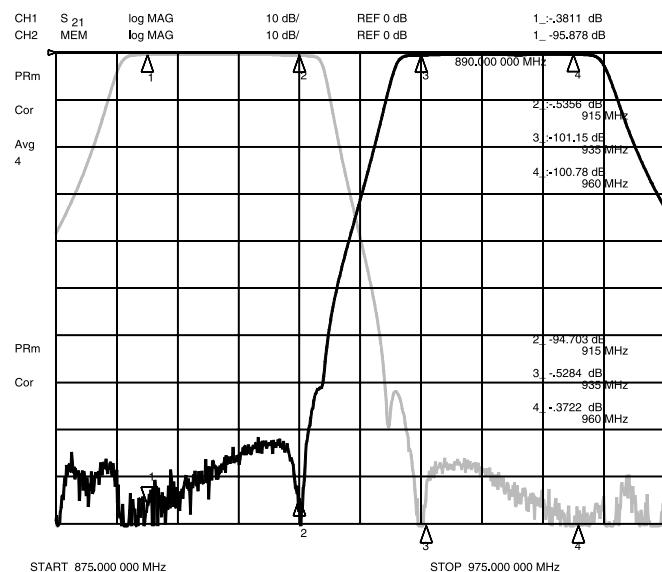
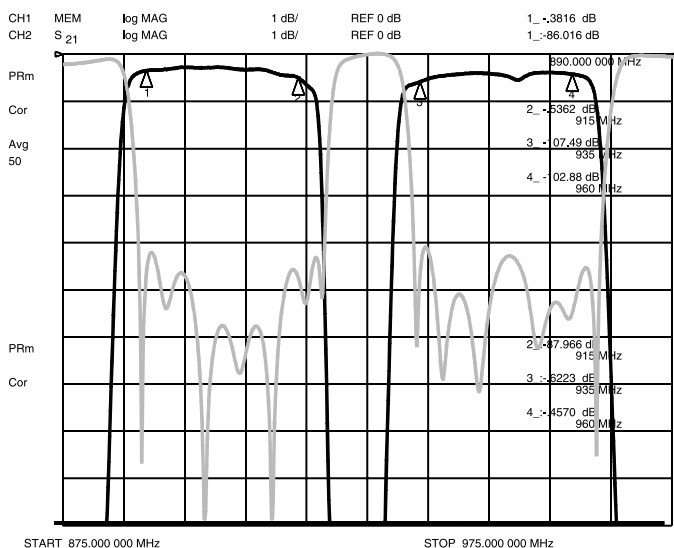
NOTES:

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

