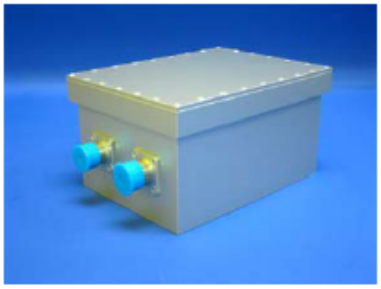
FC-6C87511ND01

869-880MHz AMPS/CDMA Transmit Filter

Features



- Designed for 800 MHz AMPS/CDMA transmit applications co-located with GSM system.
- Improves GSM system performance by cleaning AMPS/CDMA sideband spurious signals.
- Provides high 60dB rejection in the GSM receive frequency band minimizing interference.
- Compact - Enables easy installation into existing radio base stations with space limitations.
- Environmentally sealed – IP65
- performance even in open-air environments.
- Low insertion loss - Ensures minimal impact on transmitted EIRP and coverage.
- Also available in 716 DIN connector.

Product Description

Comba designs and manufactures a wide range of filters to suit most applications in the range 800-2500MHz. Using the latest design techniques, we offer compact designs featuring high quality and performance. Filters can be implemented using 2 to 8 cavities to meet customer-specific bandwidth requirements and can be silver-plated for improved intermod performance and reduced insertion loss. All filters are custom designed to customer specifications at the factory.

The CF-0811NA00 bandpass filter is designed for 800 MHz CDMA or AMPS transmit applications. It improves GSM system performance by cleaning the sidebands of CDMA/AMPS transmission. Designed using high performance cavity filters, these units provide high level of rejection to CDMA/AMPS sidebands, low insertion loss and good intermodulation performance. The CF-0811NA00 can be installed into an existing 800 MHz CDMA/AMPS base station, co-located with a GSM system, to resolve interference problems with minimal impact to the overall system performance. The unit is housed in a milled aluminum case that is sealed to IP65. Suitable for applications with several AMPS/CDMA carriers.

Technical Specifications

Electrical

Pass Band – [MHz]	869 - 880
Bandwidth – [MHz]	11
Insertion Loss – [dB]	≤ 0.6
Pass Band Flatness – [dB] (over any 2MHz band)	< 0.3
Pass Band Return Loss – [dB] - Minimum - At room temperature	 > 18 > 20
Integrated Mean Sq. Phase Error - [rad²]	≤ 0.0045
Filter Selectivity – [dB]	
DC – 776 MHz	> 65
776 – 820 MHz	> 48
820 – 824 MHz	> 45
824 – 849 MHz	> 25
856 – 866 MHz	> 0
869 – 880 MHz	< 0.6
890 – 915 MHz	> 60
920 – 2000 MHz	> 40
2600 – 2690 MHz	> 0

Electrical

Power Handling (Peak, 5us) – [W]	4000
3rd Order Intermod – [dBc] (at 890-915 and 856-866 MHz)	≥ 130 @ 2x43dBm carrier
Group Delay – [nsec]	< 75
Absolute Group Delay – [nsec] (at Pass Band Center)	45 - 140
Impedance – [ohm]	50

Mechanical

Dimension (excl. conn) LxWxH – [mm]	155 x 116 x 84
Housing Material	Aluminum
Finish	Silver Painted
Connector Type	2x N-Female
Weight – [kg]	2.0
Mounting Holes at Bottom	4 x M4
Temperature Range – [°C]	-40 to +85
Operating Humidity – [%]	< 95
Environmental Class	IP65

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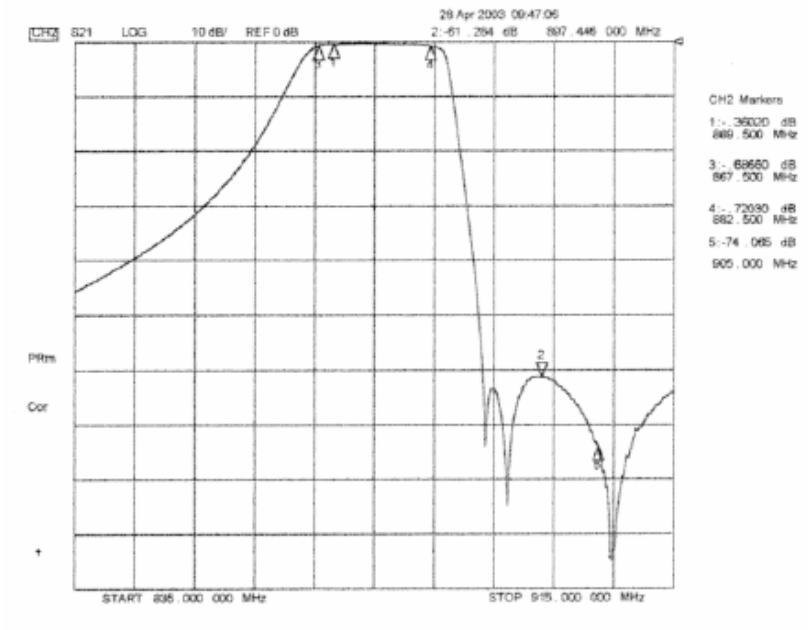
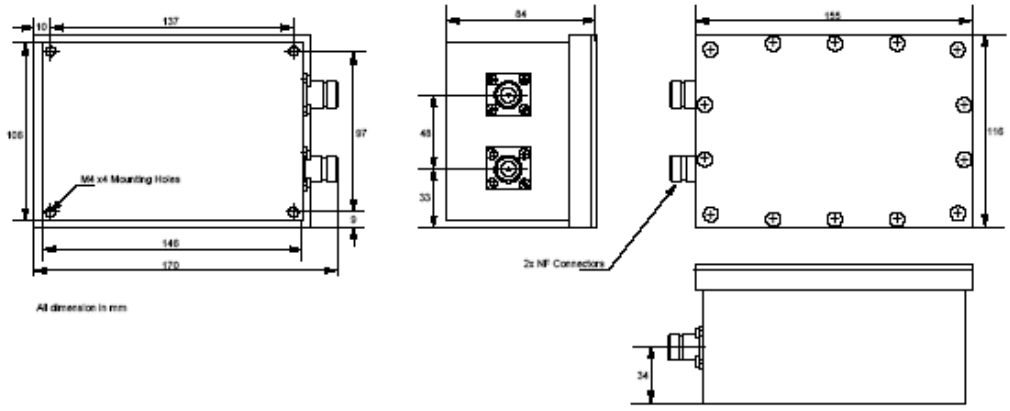
Filter Response Curve



Mechanical Outline Drawing



All dimension in mm