



Applications

- Military Tactical Radios
- Military Radar
- Test and Measurement Equipment
- Industrial and Medical Equipment

Features

- Small Size (38mm X 38mm X 5.6mm)
- 2 Watt CW power handling
- 4.5 dB typ. IL



1 Specification

1.1 Electrical Specifications

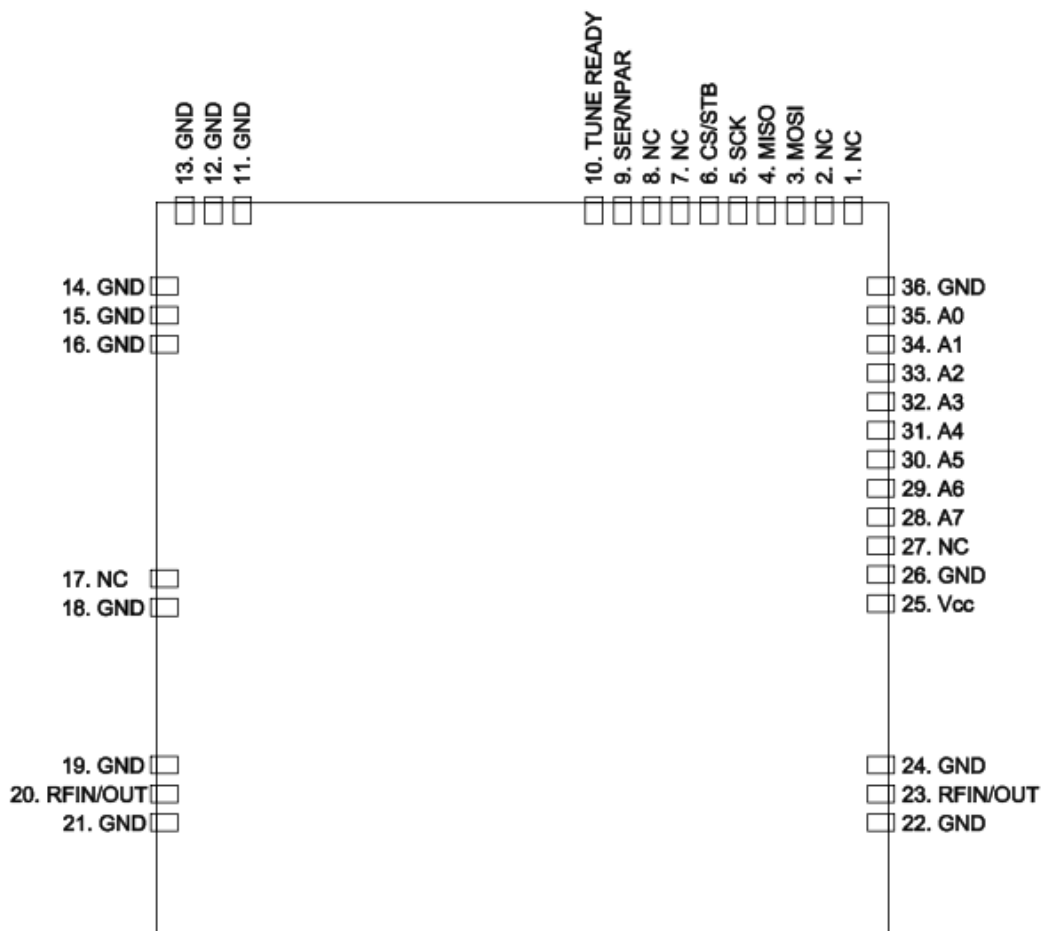
Frequency Coverage	960 – 1240MHz
Input/Output Impedance	50 Ω
Inband Input/Output VSWR	1.5:1 typ. 2.0:1 max 2.0:1 max
Insertion Loss	4.5 dB typ
Tuning Step Size	2 MHz
SEL 10% [$f_0 \pm 10\%$]	20.0 dBc Typ.
% BW(3dB BW/ f_0)	6.0 % typ.
Shape Factor (30dB/3dB)	6.8 typ.
Maximum RF input Power for for linear operation	30 dBm
Operating Temperature Range	-40 to +85 °C

1.2 Control & Interface

Tuning Control	Serial (SPI)/ parallel
DC Power (Static)	+3.3 VDC @ 10 mA Max. (Not used 100 VDC)
Tuning Speed	225 uS
Tuning Algorithm	Channel Select (Binary or Decimal)

2 Pinout and Functional Information

2.1 Pin out

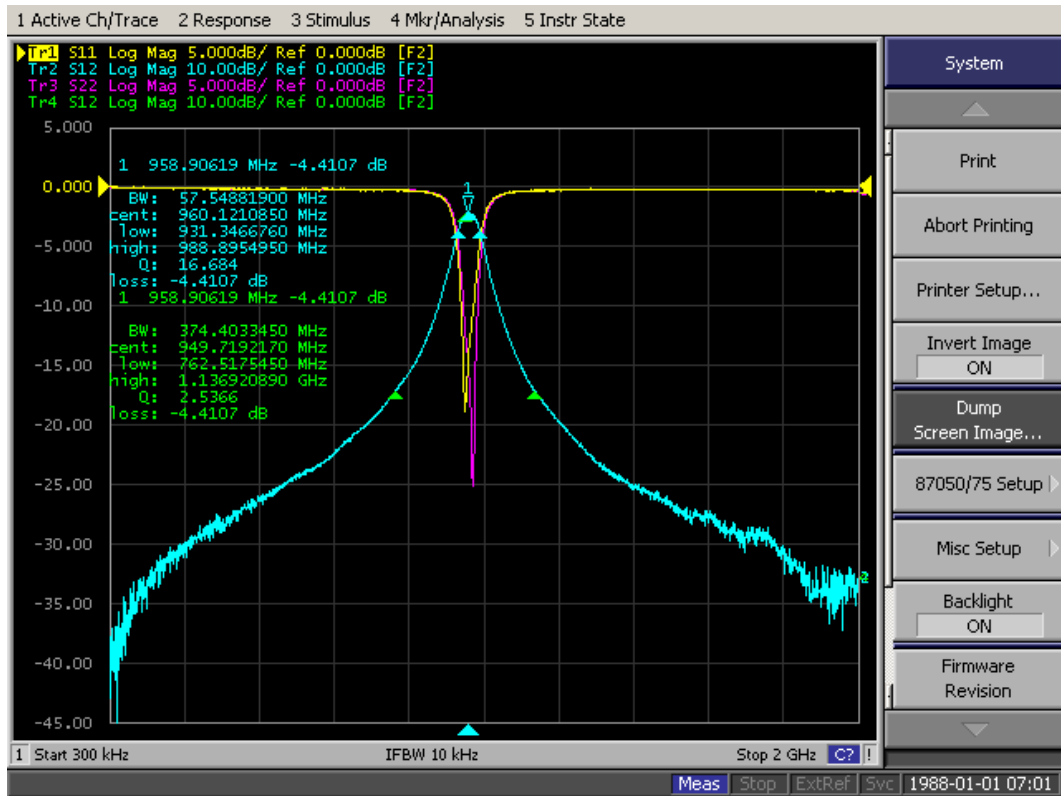


2.2 Pin Description

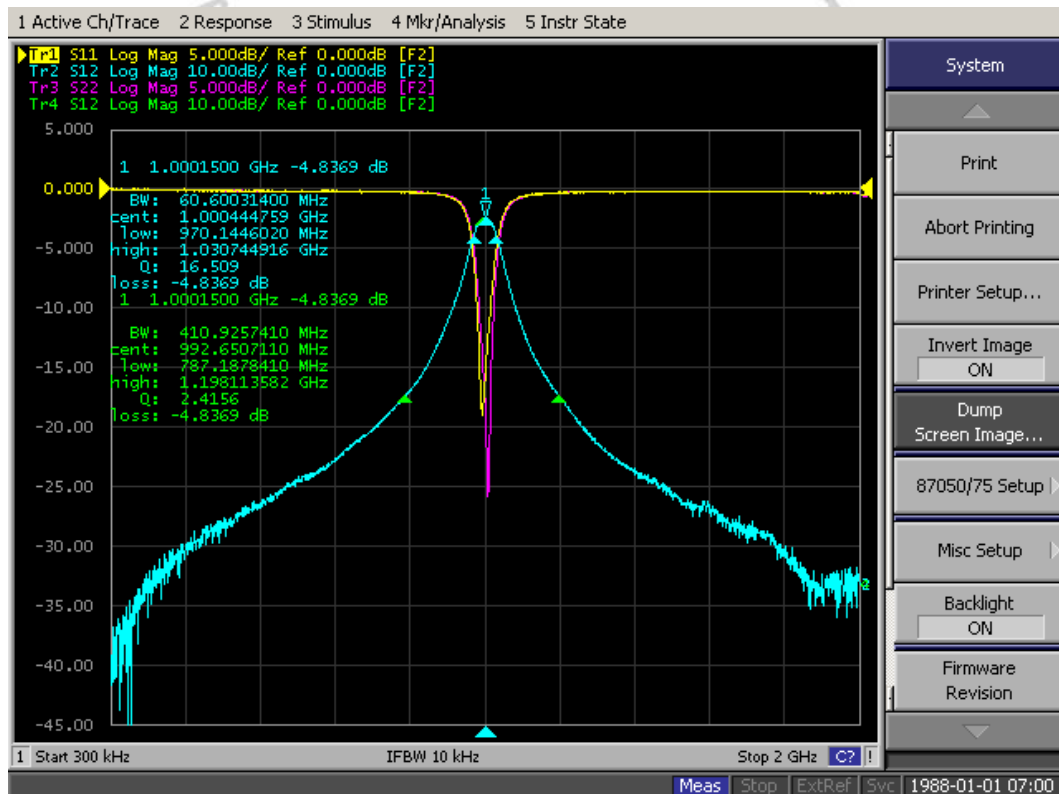
Pin Number	Label	Description
20, 23	RF IN/OUT	RF SIGNAL INPUT / OUTPUT
25	Vcc	Supply voltage Input. $3.135V \leq V_{cc} \leq 3.6V$
3	MOSI	SPI Master Out Slave In.
4	MISO	SPI Master Out Slave In.
5	SCK	SPI Clock. SCK is used to clock in the command data in SPI command mode.
6	CS/STB	IN SPI mode: SPI Chip Select. When CS/STB is take low, the control circuitry wakes up and SCK is enabled for shifting data on MOSI into the filter. When CS/STB is taken high, SCK is disabled and the specified tune command is executed.
7	SER/PAR	Serial/Parallel Command Interface Selection.
8	TUNE READY	Tune ready indicator.
28, 29, 30, 31, 32, 33, 34, 35	A0~A7	Parallel Data Interface. Tune command bits which indicate which frequency the filter should tune to in Parallel tune command mode. A7=MSB, A0=LSB
1, 2, 7, 8, 17, 27	NC	Do not connect
11, 12, 13, 14, , 15, 16, 18, 19, 21, 22, 24, 26, 36	GND	Digital and Analog GND

3 Typical Characteristics

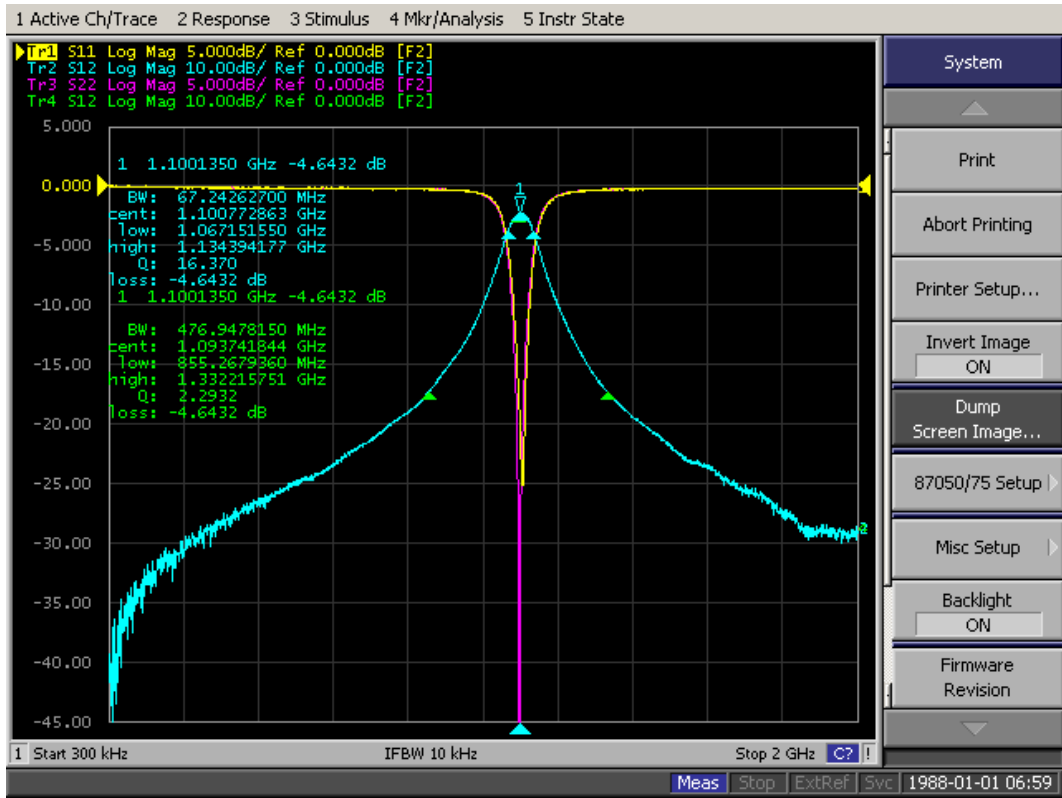
3.1 960 MHz



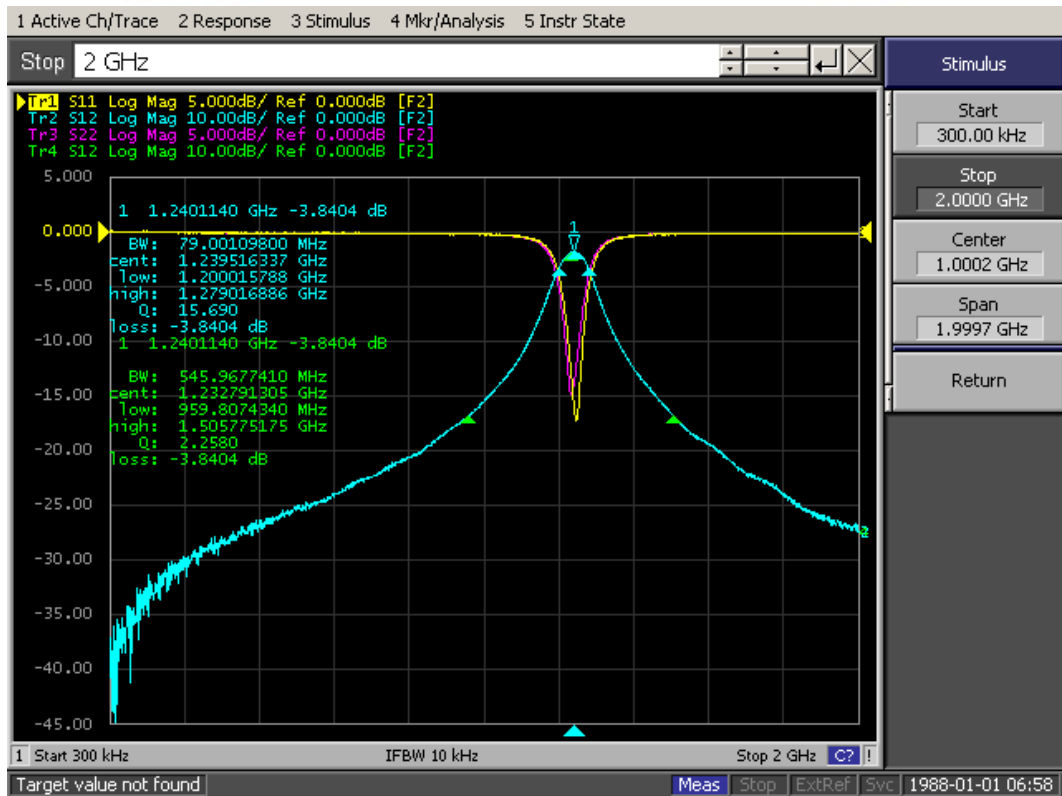
3.2 1000 MHz



3.3 1100 MHz

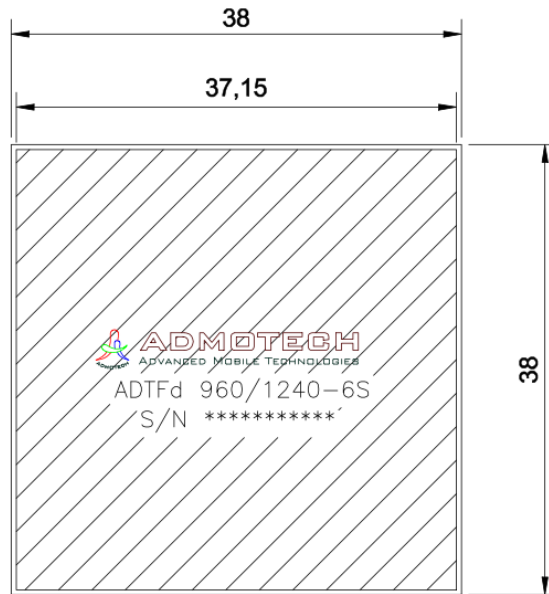


3.4 1200 MHz



4 Mechanical Drawings

4.1 Dimension [Unit: mm]



TOP VIEW



SIDE VIEW

4.2 Recommended PCB Land Pattern [Unit: mm]

