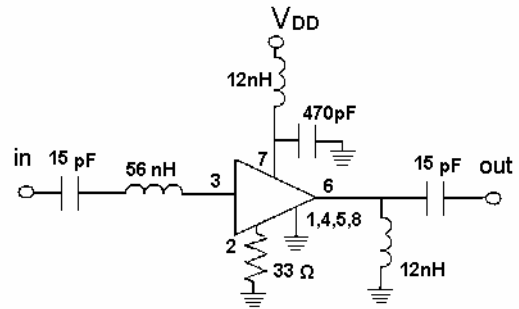


## Product Features

- Operation from Single Supply (+5V)
- 1.2dB Noise Figure
- +17dB P1dB@ 60mA
- OIP3=30dBm
- Lead Free, RoHS Compliant
- SOIC-8 Plastic Package



## Product Description

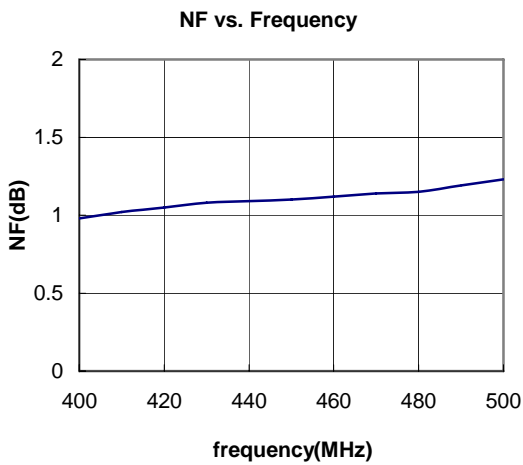
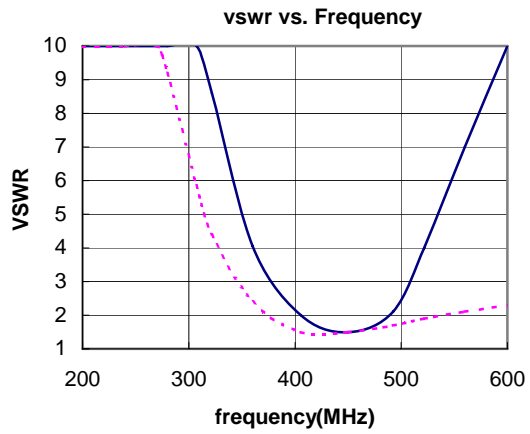
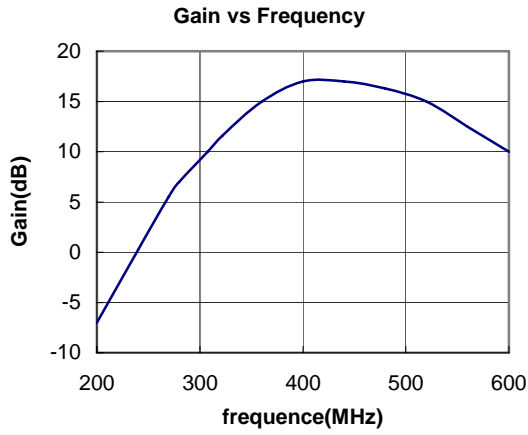
F102 is a low noise GaAs MMIC amplifier with SOIC-8 plastic package. It is intended to be used as a driver amplifier in telephone and mobile phone GSM and 450MHz's ISM system.

## Typical Electrical Characteristics at 25°C

Symbol	Unit	Test Condition	Min.	Typ.	Max.
Gain	dB	5V, 60mA <sup>2</sup>	15	17	
NF	dB	5V, 60mA <sup>2</sup>		1.2	1.4
Input VSWR				2.0	
Output VSWR				1.5	
OP1dB	dBm	5V, 60mA <sup>2</sup>		14.5	
OIP <sub>3</sub>	dBm	5V, 60mA <sup>2</sup>		27	
S <sub>12</sub>	dB			30	

1. All tests are finished under 50Ω systems unless special explanation.
2. bias resistor=33 Ohms

### Typical Characteristic Curve (+5V)



### Pin Function

<b>PIN 1</b>	<b>PIN 2</b>	<b>PIN 3</b>	<b>PIN 4</b>
GND	R <sub>EXT</sub>	IN	GND
<b>PIN 5</b>	<b>PIN 6</b>	<b>PIN 7</b>	<b>PIN 8</b>
GND	OUT	V <sub>DD</sub>	GND

### Absolute Maximum Ratings <sup>1</sup>

Parameters	Absolute Limit
V <sub>DD</sub>	+10V
Max. RF Input Power	+17dBm
Max. Device Current (I <sub>D</sub> )	120mA
Operating Temp. range (T <sub>L</sub> )	-40°C 到 +85°C
Max. Storage Temp.	-65°C 到 +150°C

1. Operation beyond any one of these limits may cause permanent damage.

### SOIC-8 Package Outline

