

AMP6000

Description

AMP6000 is a Fixed Gain Amplifier optimized for any application requiring high performance, wide bandwidth Gain Block.

Features

- Wide Band : 10 MHz to 6000 MHz
- P1dB Output Power: 15 dBm
- Output IP3: +33 dBm
- Gain : 14 dB
- 50 Ohm I/O's

Applications

- Cellular/3G & LTE/WiMAX/4G
- LO Driver Applications
- Microwave Radio
- Test & Measurement Equipment



Electrical Specifications

Parameter	Min.	Typ.	Max.	Units
Frequency Range	10		6000	MHz
Gain	12	14	15	dB
Input Return Loss		-20		dB
Output Return Loss		-9	-7	dB
Reverse Isolation		25		dB
Output Power for 1 dB Compression (P1dB)		15		dBm
Output Third Order Intercept (IP3)		33		dBm

Max. Ratings

DC Voltage at input or output	25 Volt
RF input power	20 dBm
Operating Temperature	-40°C to 85°C

Exceeding any of the limits of this section may lead to permanent damage to the device. Furthermore, extended operation at these maximum ratings may reduce the life of this device.

Typical Characteristics

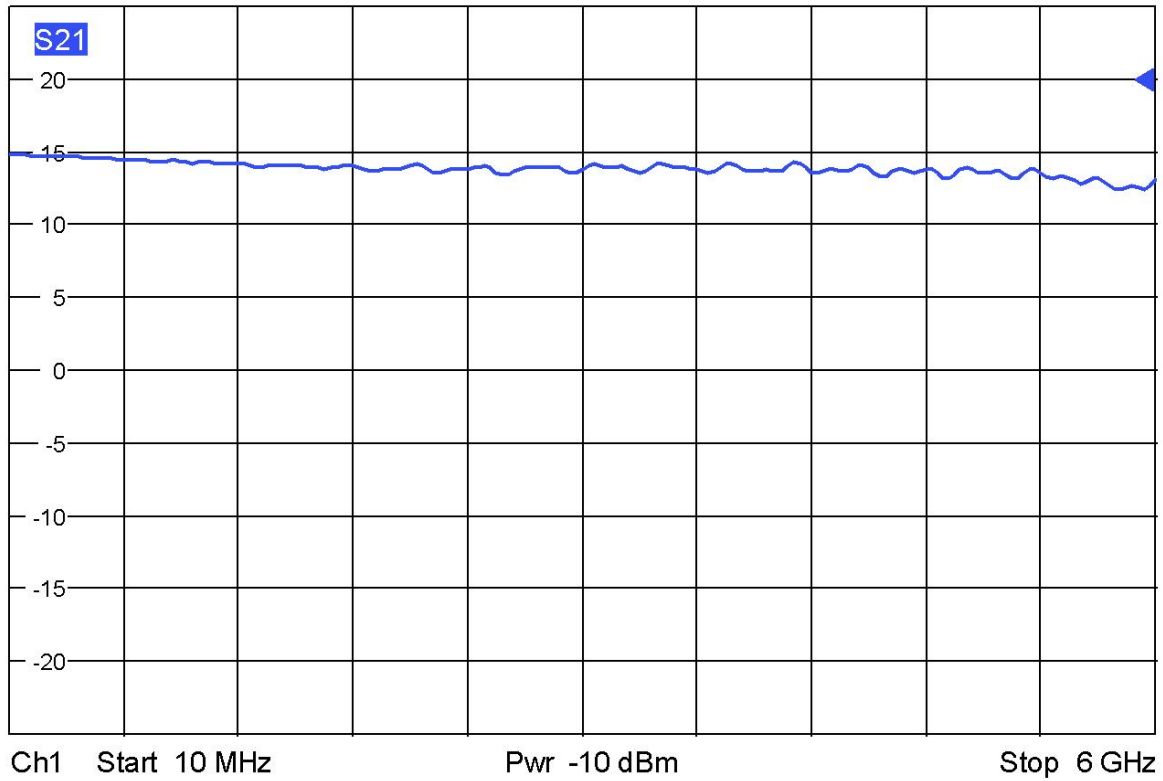


Figure 1, Small Signal Gain (S21) vs Frequency

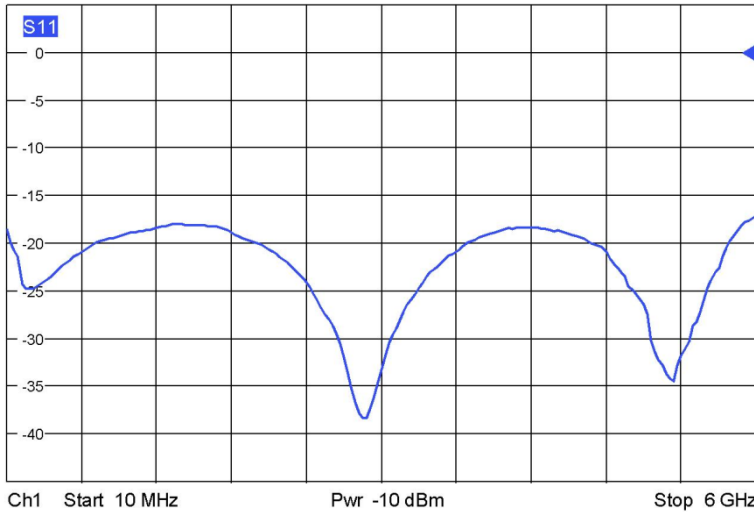


Figure 2, Input Return Loss (S11) vs Frequency

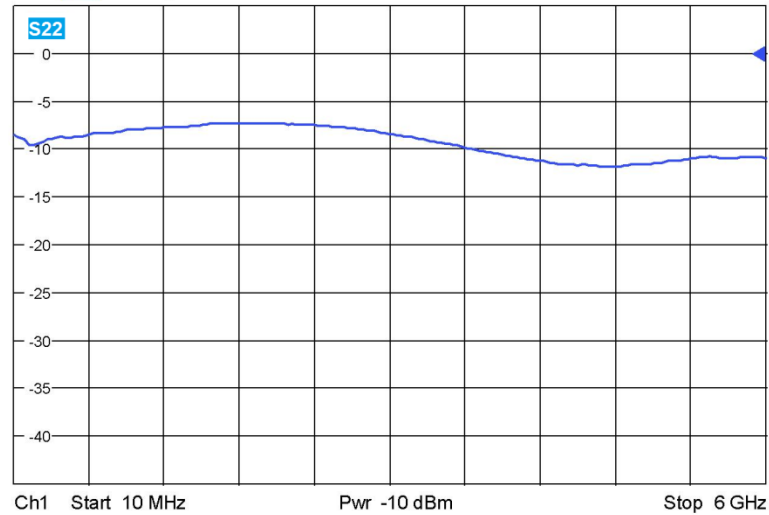


Figure 3, Output Return Loss (S22) vs Frequency

MATLAB Code Example

```
sys=serial('COM113','BaudRate',1000000,'DataBits',8,  
'Parity','none','FlowControl','none','Timeout',1);  
  
fopen(sys); % open COM port  
  
AMP6000_address = 17;  
  
ION_ON(sys,AMP6000_address); % turn module ON  
  
fclose(sys); % close COM port
```