

# VAT6000 Variable Attenuator

10 MHz to 6000 MHz

## VAT6000

### Description

VAT6000 is RF Variable Attenuator optimized for any application requiring high performance, wide bandwidth variable attenuation control.

### Features

- Wide Band : 10 MHz to 6000 MHz
- High Power Handling: >20 dBm
- Input IP3: +55 dBm
- Attenuation : 0 dB to -31.75 dB
- Attenuation Resolution : 0.25 dB
- 50 Ohm I/O's

### Applications

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



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## Electrical Specifications

Parameter	Min.	Typ.	Max.	Units
Frequency Range	10		6000	MHz
Insertion Loss	1	2.5	5	dB
Attenuation Setting	-31.75		0	dB
Attenuation Resolution		0.25		dB
Return Loss	-25	-15	-7	dB
RF Input Power			23	dBm
Input IP3		55		dBm

## Max. Ratings

DC Voltage at input or output	25 Volt
RF input power	30 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.

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## Typical Characteristics

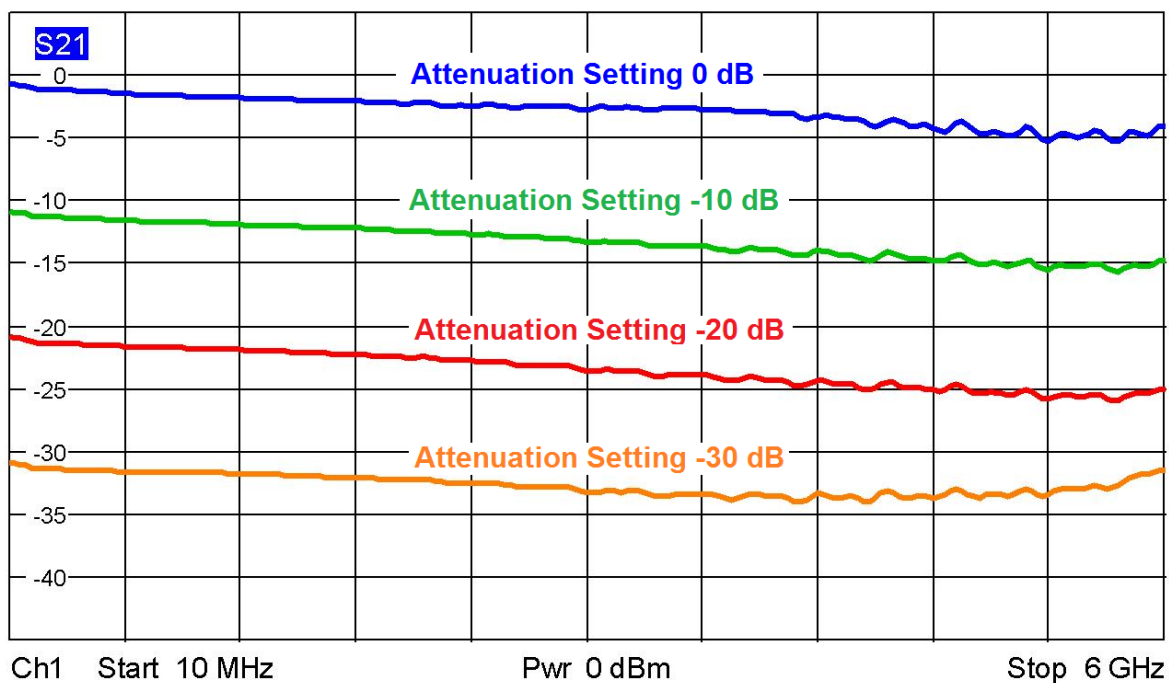


Figure 1, Attenuation vs Frequency

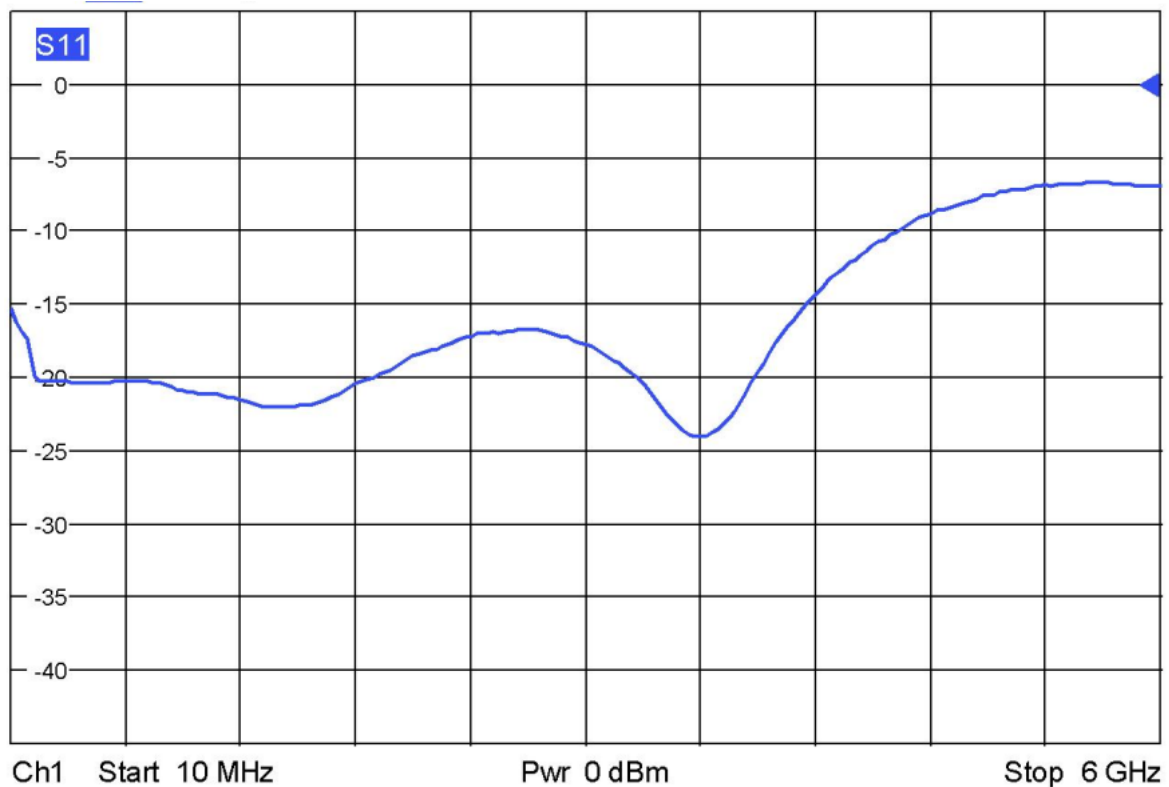


Figure 2, Return Loss vs Frequency

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## MATLAB Code Example

```
sys=serial('COM113','BaudRate',1000000,'DataBits',8,'Parity','none','FlowControl','none','Timeout',1);

fopen(sys); % open COM port

VAT6000_address = 18;

ION_ON(sys,VAT6000_address); % turn module ON

VGA(sys,VAT6000_address,-10); % set attenuation -10 dB

fclose(sys); % close COM port
```