

### Manual Step Attenuator

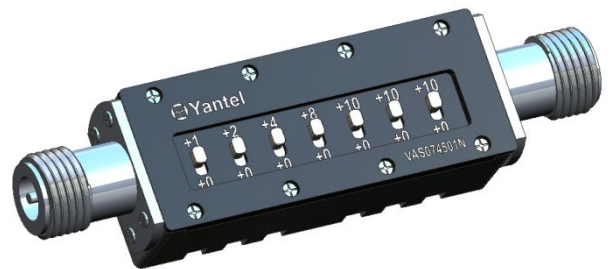
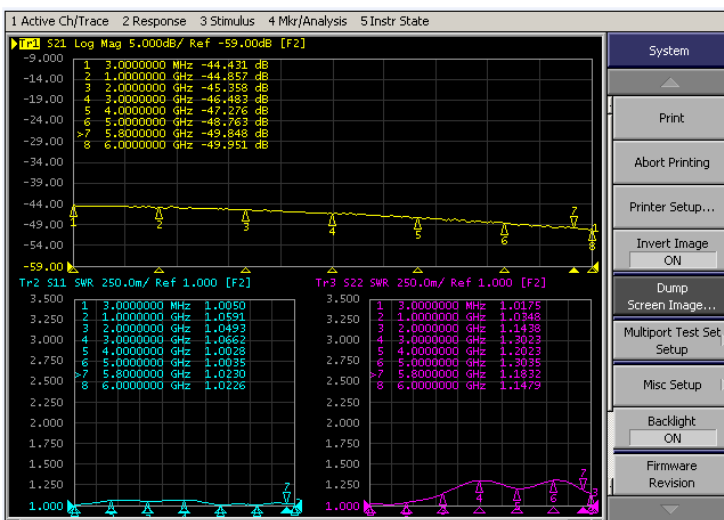
- ◆ DC to 5.8GHz
- ◆ 0 to 45dB in 1dB Step
- ◆ 5 Watt
- ◆ Choice of SMA or N Type Connectors

### Features

- Using advanced microstrip technology, ultra-small size
- Attenuation values are adjustable in a power-on state, no sudden big reflection.  
It adopts an innovative technology, and thus it eliminates sudden big reflection in attenuators when attenuation is being adjusted, preventing the preliminary RF circuit from being burnt, and keeping the system stable
- Step values: 1dB, 2dB, 4dB, 8dB,10dB,10dB,10dB
- 46 attenuation values
- High attenuation accuracy, low insertion loss
- High adjustment accuracy
- Low cost – High Performance
- Adjusting the transmitting (receiving) distance of RF signal precisely. Adjusting accuracy is limited to 5cm.
- Switch repeatability avg.> 10000 operations (5000 cycles) per switch.
- PC(Polycarbonate) Switch, operating temperature of 120°C is available.
- Attenuation values are adjustable in a power-on state, test data can be read continuously, no interruption.

### Characteristic

For example the testing curves of VAS074501N5 of 45dB



### Specifications

<b>Frequency Range</b>	DC to 5.8GHz
<b>Attenuation</b>	0 to 45dB
<b>Step Value</b>	1dB
<b>Insertion loss at 0dB (typ.)</b>	1.6dB DC to 4GHz 2.1dB 4 to 5GHz 2.8dB 5 to 5.8GHz
<b>Insertion loss at 0dB (Max.)</b>	2.0dB DC to 4GHz 2.6dB 4 to 5GHz 3.1dB 5 to 5.8GHz

### Attenuation Accuracy (typ.)

-1.2dB~+2.6dB in DC to 4GHz  
0~+3.6dB in 4 to 5GHz  
0~+5.0dB in 5 to 5.8GHz

### Attenuation Accuracy (Max.)

-1.5dB~+3dB in DC to 4GHz  
0~+4.5dB in 4 to 5GHz  
0~+5.5dB in 5 to 5.8GHz

<b>Nominal Impedance</b>	50 Ohm
<b>Average Power</b>	5 Watt
<b>Operating Temperature</b>	-40°C to +85°C

Freq. Range (GHz)	VSWR(:1)	
	Typ.	Max.
DC to 4	1.25	1.5
4 to 5.8	1.35	1.65

### Yantel Corporation

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### Model No. Description

VAS                        \*\*                          \*\*                          \*\*                          \*                          \*                          \*    
                                  Type                      Attenuation Range                      Step Value                      Connector Type                      Max. Power                      Connector Option

**VAS:** Step Variable Attenuator

**Type:** 07 represents type number

**Attenuation Range:** Maximum attenuation.

**Connector Type:** S and N available. S is SMA and N is N type connector.

**Max. Power:** 2 and 5 are available, currently 2W and 5W are available.

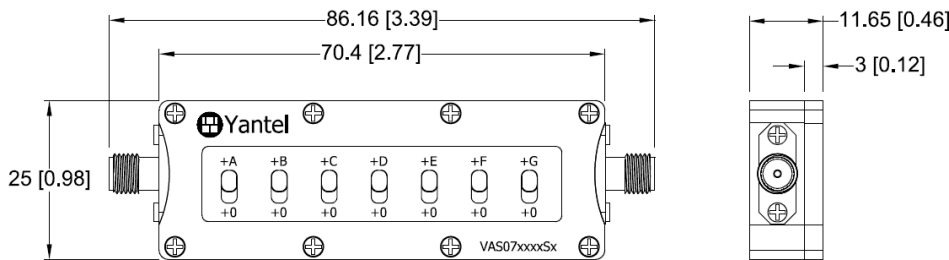
### Connector Options:

Options	IO
1	Female/Female
2	Male/Female
3	Male/Male

**Connector Position:** "A" represents back connectors, without "A" represents left and right connectors.

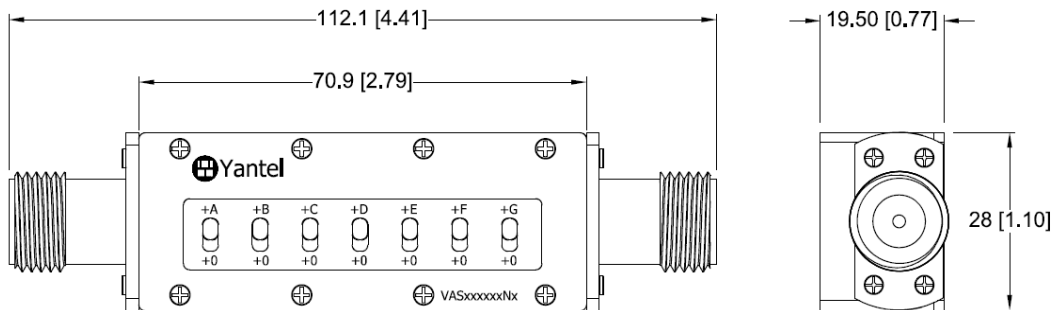
### Package Outlines

#### SMA Connector                      Unit:mm (inch)



Package type: S51

#### N-type Connector



Package type: N51

### NOTE:

1. ALL dimensions shown in mm (tolerance: +/-0.2mm) unless stated otherwise
2. RoHS Compliant in accordance with EU Directive (2011/65/EU)

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**Attention**

It is much easier to adjust the switch by tools like plastic screw driver.