

#### **Features**

• Continuous variable: 0~15dB

Power rating :1 W

• Able to be mounted soldered on the PCB

• Wide frequency range: DC ~ 2GHz available

Low VSWR

• Low insertion loss

• High performance, competitive price

Wide attenuation range

• Impedance:  $50\Omega$  or  $75\Omega$ 

Operating temperature:-40°C ~ +105°C

 Compared with digital attenuators, zero distortion, no extra IP3, lower noise, higher reliability.

• At least 500 circles operation.

Customized attenuation values available

# Miniature Variable Attenuator VAC Series

◆DC to 2GHz

**♦**1 W

◆Resin DIP package

**♦**Thick Film Chip

## **Specifications**

Frequency Range DC to 2GHz Attenuation 0 to 15dB

Insertion loss at 0dB DC to 1GHz 0.6dB (Typical)

1GHz to 2GHz 2.0dB (Typical)

Average Power 1 W

Impedance 75 Ohm

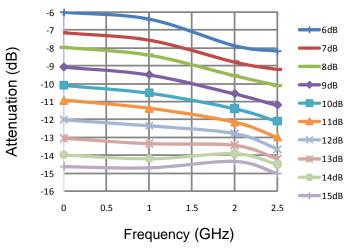
Operating Temperature -40°C to +105°C

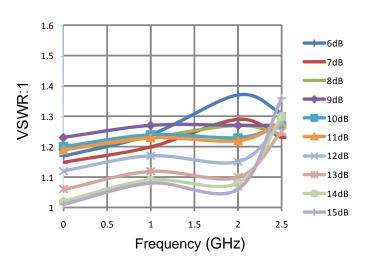
Attenuation (dB)	FREQ.RANGE (GHz)	Attenuation Accuracy(dB)
0 to 7	DC to 1	0.6
	1 to 2	2.5
7 to 15	DC to 1	0.5
	1 to 2	1.5

Attenuation (dB)	FREQ.RANGE (GHz)	Typical VSWR:1
0 to 2	DC to 1	1.6
	-	-
2 to 6	DC to 1	1.35
	1 to 2	1.7
6 to 15	DC to 2	1.40

## Characteristic

The testing curves of VAC18D(6 to 15 dB)





**Yantel Corporation** 

Rev A1.0 Add: 3F, Building 3, Southern District 2 of ZhongGuan Honghualing Industrial Park, Xili, Nanshan, Shenzhen, China..
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533



Note: This product cannot withstand high temperature over 200 °C, therefore lead free or lead reflow soldering is not suitable.

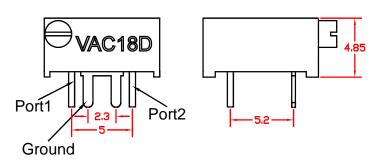
Otherwise, its performance and reliability would be greatly damaged.

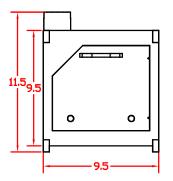
Wave soldering should be adopted for this product.

Please click the link below to obtain the wave soldering profile for reference:

http://www.yantel-corp.com/asp\_bin/downfile/201511/Wave%20Soldering%20Profile.pdf

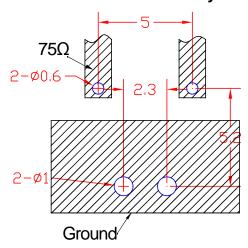
### Package Outlines(mm)





Rev A1.0

#### **Recommended PCB Layout**



**PCB Layout**