



# High Frequency Chip Attenuator

## ■ATS series

### Features

- Attenuation range up to 30GHz
- Internal circuit specially designed for 0-10dB attenuation.
- Miniature surface mount chip attenuator (2012 size)
- Signal line sandwiched by ground – excellent heat dissipation and low noise.

### Applications

- Wireless communication devices and base stations
- Wireless communication modules



## ◆Part numbering system

### ATS 2012 - 10dB - T1

Series code

Packing quantity :  
T1 (1,000pcs) , T05 (500pcs)

Size : ATS2012

Attenuation

## ◆Electrical Specification

Type	ATS2012			
Attenuation	0dB	1~2dB(1dB step)	3~7dB(1dB step)	8~10dB(1dB step)
Circuit Type	Thru	Tee	Pi ( $\pi$ )	Dual pi (Dual $\pi$ )
Equivalent circuits	①	②	③	④
Attenuation tolerance	$\pm 0.5\text{dB}$ (0 ~ 20GHz) , $\pm 0.75\text{dB}$ (20 ~ 30GHz)			
V S W R	$\leq 1.5$ (0 ~ 20GHz) , $\leq 1.7$ (20GHz ~ 30GHz)			
Impedance	50 $\Omega$			
Operating frequency	DC~30GHz			
Rated power	100mW			
Rated operating temperature	70 $^{\circ}\text{C}$			
Operating temperature	-55 $^{\circ}\text{C}$ ~+125 $^{\circ}\text{C}$			
Packaging quantity	500pcs/reel(T05)			
	1,000pcs/reel(T1)			

## ◆Equivalent Circuit and pin arrangement



1 : Input pin  
2 : Output pin  
3 : GND

## ◆ Dimensions



Type	L	W	t	L1	a	b	W1	W2	W3
ATS2012 <sup>*1</sup>	2.00±0.20	1.22±0.20	max 0.40	1.80±0.10	0.36±0.10	0.33±0.10	0.25±0.10	0.25±0.10	0.15±0.10

(unit : mm)

## ◆ Derating Curve

