



# Precision chip attenuators

## ■ PAT series

### Features

- Excellent noise characteristics, small stray/parasitic inductance and capacitance.
- Excellent high frequency characteristics.
- PAT0510S are the smallest and lightest thin film chip attenuators.

### Applications

- Wireless communication devices, wireless communication modules, etc.



## ◆ Part numbering system

**PAT 1632 - C - 3dB - T5**

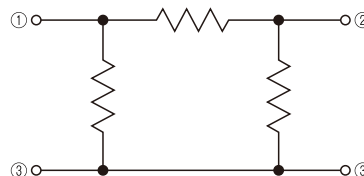
Series code	PAT 1632	Attenuation	- C - 3dB	Impedance	- T5	Packaging quantity: B(Refer Package item), T1(1,000pcs), T2 (2,000pcs), T5(5,000pcs), T10(10,000pcs)
Size, circuitry : PAT0510S, PAT0816 PAT1220, PAT1632, PAT3042S						

## ◆ Electrical Specification

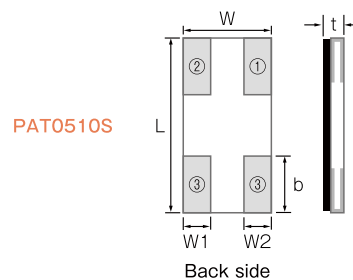
Series name	PAT0510S			PAT0816			PAT 1220	PAT1632		PAT3042S	
Attenuation	0~3dB	4~7dB	8~10dB	0~3dB	4~7dB	8~10dB	0~10dB	0~10dB	16dB	0~10dB	16, 20dB
Attenuation tolerance	±0.3dB	±0.5dB	±1.0dB	±0.3dB	±0.5dB	±0.7dB	±0.3dB	±0.3dB	±0.5dB	±0.3dB	±0.5dB
Impedance	50Ω(C)			50Ω(C)				50Ω(C)		50Ω(C), 75Ω(D)	
V S W R	<1.3			<1.3(~ 6GHz), <1.5(6 ~ 10GHz)			<1.3	<1.3		<1.2(50Ω), <1.3(75Ω)	
Operating frequency	DC ~ 10GHz			DC ~ 10GHz				DC ~ 3GHz		~ 3GHz(50Ω), ~ 2GHz(75Ω)	
Rated power	32mW			63mW		100mW	125mW	250mW			
Rated operating temperature	70°C										
Operating temperature	-55°C~+125°C										
Packaging	T10			100pcs/Bag T1 T5				50pcs/Bag T1 T2			

• Contact us for 1.0 x0.5mm GBA type PAT0510  
• Contact us for high power attenuators up to 10W

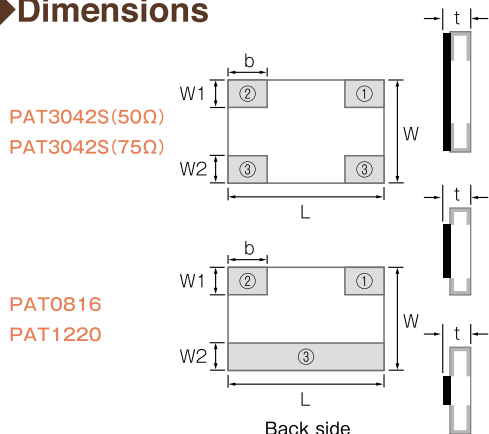
## ◆ Equivalent circuits



## ◆ Dimensions



## ◆ Dimensions



Type	Size (inch)	L	W	t	b	W1	W2
PAT0510S	0402	1.00±0.05	0.50±0.05	0.34±0.05	0.27±0.05	0.12±0.04	0.12±0.04
PAT0816	0603	1.60±0.10	0.80±0.10	0.40±0.10	0.50±0.15	0.20±0.10	0.20±0.10
PAT1220	0805	2.00±0.10	1.25±0.10	0.40±0.10	0.60±0.20	0.35±0.20	0.35±0.20
PAT1632	1206	3.20±0.20	1.60±0.20	0.40±0.10	1.00±0.20	0.40±0.20	0.40±0.20
PAT3042S	1712 (50Ω)	4.20±0.20	3.00±0.20	0.80±0.15	0.50±0.20	0.95±0.20	0.90±0.20
PAT3042S	1712 (75Ω)	4.20±0.20	3.00±0.20	0.80±0.15	0.30±0.20	0.55±0.20	0.60±0.20

(unit : mm)