

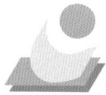
PAT series, RAT series, high-precision chip attenuators



Minimized current noise and minimized stray capacitance/residual inductance. Excellent performance in high-frequency applications.

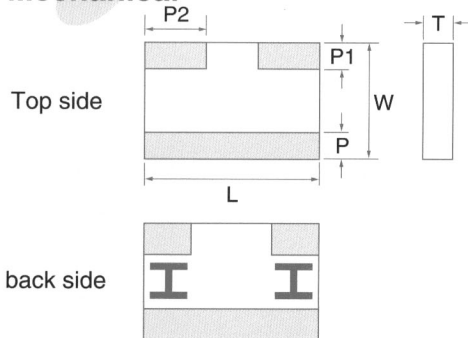
NEW Smallest in the market PAT0510S, Thin-film chip attenuator that is the smallest and lightest in the market.

NEW RAT1010X, Thick film chip attenuator with small dimension of 0404



SPECIFICATIONS

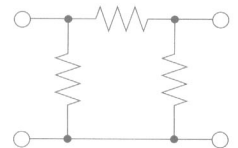
Mechanical



Dimension (mm)	RAT1010X (0404)	PAT0510S (0402)	PAT1220 (0805)	PAT1632 (1206)	PAT3042S(C) (1612)
L	1.00±0.05	1.00±0.05	2.00±0.10	3.20±0.20	4.20±0.20
W	1.00±0.05	0.50±0.05	1.25±0.10	1.60±0.20	3.00±0.20
P	0.15±0.10	0.15±0.10	0.40±0.20	0.40±0.25	0.80±0.20
P1	0.15±0.10	0.15±0.10	0.40±0.20	0.55±0.25	0.95±0.20
P2	0.33±0.10	0.27±0.10	0.50±0.20	1.00±0.25	—
T	0.35±0.10	0.35±0.05	0.40±0.10	0.40±0.10	0.80±0.15

PAT3042S(D) has different dimensions.

Equivalent circuit



Electrical

Type	RAT1010X					PAT0510S			PAT1220	PAT1632		PAT3042S		
Attenuation	1~5dB	6~9dB	10dB	11~16dB	20dB	0~3dB	4~7dB	8~10dB	0~10dB	0~10dB	16dB	0~10dB	16, 20dB	
Attenuation tolerance	±0.3dB	±0.4dB	±0.75dB	±0.8dB	±2.5dB	±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)			
VSWR	<1.3					<1.3			<1.3		<1.2(50Ω), <1.3(75Ω)			
Frequency Range	~2.5GHz		~3GHz			DC ~10GHz			DC ~10GHz	DC ~3GHz		~3GHz(50Ω), ~2GHz(75Ω)		
Power Rating	40mW					32mW			100mW	125mW		250mW		
Rated Operating Temperature	—					70°C			70°C		70°C		70°C	
Operating temperature range	-55°C~+125°C					-55°C~+125°C			-55°C~+125°C		-55°C~+125°C		-55°C~+125°C	
Package	10,000pcs/reel					10,000pcs/reel			5,000pcs/reel	100pcs/package 1,000~5,000pcs/reel		50pcs/package 2,000pcs/reel		

- PAT0510 series of 0402 chip with BGA are also available.
- RAT1010X type with 75Ω of impedance are also available.



PART NUMBER

PAT 1632 - C - 3dB - T

