



PAT series, RAT series, high-precision chip attenuators



These 3042, 1632, 1220, 1010 and 0510 size chip attenuators exhibit excellent high frequency characteristics. The surface mount package is ideal for low noise, low inductance and parasitic capacitance applications. Thin film metalization provides for very stable characteristics over temperature and time.

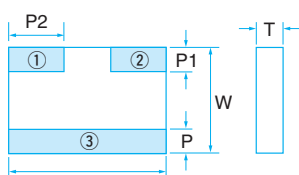
NEW Smallest in the market

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

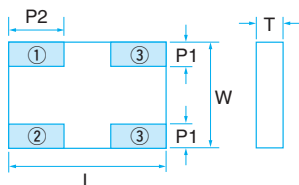
RoHS compliant

SPECIFICATIONS

Mechanical



RAT1010X, PAT1220,
PAT1632, PAT3042(C)

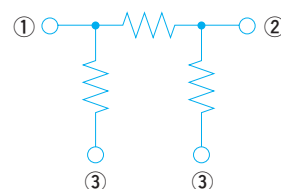


PAT0510S

Dimension (Inch Size)	RAT1010X (0404)	PAT0510S (0402)	PAT0816 (0603)	PAT1220 (0805)	PAT1632 (1206)	PAT3042S(C) (1712)
L	1.00±0.05	1.00±0.05	1.60±0.20	2.00±0.10	3.20±0.20	4.20±0.20
W	1.00±0.05	0.50±0.05	0.80±0.20	1.25±0.10	1.60±0.20	3.00±0.20
P	0.15±0.10	—	0.20±0.10	0.40±0.20	0.40±0.25	0.80±0.20
P1	0.15±0.10	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	0.50±0.20	1.00±0.25	—
T	0.35±0.10	0.35±0.05	0.40±0.15	0.40±0.10	0.40±0.10	0.80±0.15

(unit : mm)

Equivalent circuit



Electrical

Type	RAT1010X					PAT0510S			PAT0816			PAT1220	PAT1632		PAT3042S	
Attenuation	1~5dB	6~9dB	10dB	11~16dB	20dB	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	±0.4dB	±0.75dB	±0.8dB	±2.5dB	±0.3dB	±0.5dB	±0.7dB	±0.3dB	±0.5dB	±1.0dB	±0.3dB	±0.3dB	±0.5dB	±0.3dB	±0.5dB
Impedance	50Ω(C)					50Ω(C)			50Ω(C)			50Ω(C)		50Ω(C), 75Ω(D)		
VSWR	<1.3					<1.3			<1.3(~6GHz), <1.5(6~10GHz)			<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			63mW		100mW	125mW		250mW		
Rated Operating Temperature	—					70℃										
Operating Temp Range	-55℃~+125℃															
Package	10,000pcs/reel					10,000pcs/reel(T10)			5,000pcs/reel(T)			100pcs/package 1,000pcs/reel(T1), 5,000pcs/reel(T5)		50pcs/package 2,000pcs/reel(T2)		

- PAT0510 series of 0402 chip with BGA are also available.
- Please contact us for power rating of up to 10W.

PART NUMBER

PAT 1632 - C - 3dB - T(5)

Package T=Tape, B=Bulk, Taping Quantity Unit: 5(5000), 1(1000)

Attenuation

Rectangular Corner

Impedance

Impedance

Dimension, (Circuit)

Attenuation

Part Code

RAT 1010X - 3dB - C - B