

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

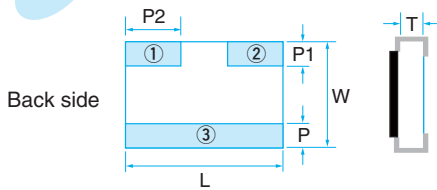
Completely lead free

RAT1010Xを除く

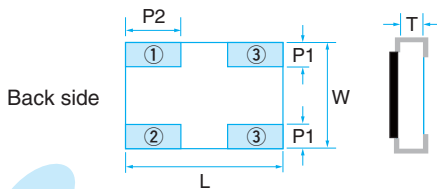


SPECIFICATIONS

Mechanical



RAT1010X, PAT1220, PAT1632, PAT3042S

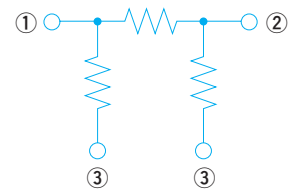


PAT0510S

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±0.10	2.00±0.10	3.20±0.20	4.20±0.20
W	1.00±0.05	0.50±0.05	0.80±0.10	1.25±0.10	1.60±0.20	3.00±0.20
P	0.25±0.05/-0.1	-	0.20±0.10	0.35±0.20	0.40±0.20	0.90±0.20
P1	0.25±0.05/-0.1	0.12±0.04	0.20±0.10	0.35±0.20	0.40±0.20	0.80±0.20
P2	0.33±0.10	0.27±0.05	0.50±0.10	0.60±0.20	1.00±0.20	0.50±0.20
T	0.42±0.05	0.34±0.05	0.40±0.10	0.40±0.10	0.40±0.10	0.80±0.15

(unit : mm)

Equivalent circuit



Electrical

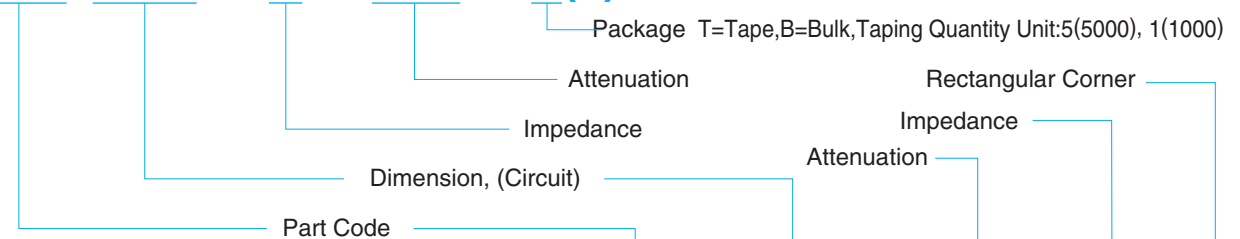
Type	RAT1010X				PAT0510S			PAT0816			PAT1220	PAT1632		PAT3042S		
Attenuation	1~5dB	6~9dB	10dB	11~16dB	20dB	0~3dB	4~7dB	8~10dB	0~3dB	4~7dB	8~10dB	0~10dB	0~10dB	16dB	0~10dB	16, 20dB
Attenuation tolerance	±0.3dB	±0.4dB	±0.75dB	±0.8dB	±2.5dB	±0.3dB	±0.5dB	±0.7dB	±0.3dB	±0.5dB	±1.0dB	±0.3dB	±0.3dB	±0.5dB	±0.3dB	±0.5dB
Impedance	50Ω(C)				50Ω(C)	50Ω(C)			50Ω(C)	50Ω(C)		50Ω(C), 75Ω(D)				
VSWR	<1.3				<1.3	<1.3			<1.3	<1.3		<1.2(50Ω), <1.3(75Ω)				
Frequency Range	~2.5GHz		~3GHz		DC ~10GHz	DC ~10GHz			DC ~3GHz	DC ~3GHz		~3GHz(50Ω), ~2GHz(75Ω)				
Power Rating	40mW				32mW	63mW			100mW	125mW		250mW				
Rated Operating Temperature	-				70°C											
Operating Temp Range	-55°C ~ +125°C															
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)



RAT 1010X - 3dB - C - B