



Product Family: [High Power Chip Attenuators](#)

Part Number Series: [PAT P-Series](#)

<p>PAT3042P (1W/5W) PAT3060P (1.5W/10W)</p>	<p>Construction:</p> <ul style="list-style-type: none"> • High Purity Alumina Substrate • Ni alloy thin-film resistive elements • Beam Leads mounted to terminations with high temp solder. • Attenuator chip is mounted to Ni plated flange with eutectic solder. 	<p>Features:</p> <ul style="list-style-type: none"> • 1712 and 2412 English case sizes • Attenuation values between 0-20dB • Attenuation tolerances as tight as ±0.1dB • 50Ω impedance • High volume production suitable for commercial and special applications
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Description:
 These precision chip attenuators offer a very wide functional frequency range and are ideal for circuits that handle different frequencies and high power. Compared to attenuation circuits consisting of a combination of discrete resistors, the greatly reduced parasitic capacitance and inductance of these attenuators allow for the true value to be obtained. One center signal lead terminal and grounded to a heat sink offer easy integration within connectors. Installing on a heat sink can greatly increase the power handling capability. The standard offering is for these products to be placed into a cardboard tray and wrapped in a polyethylene bag.

Product Dimensions:

<p>Thermal Resistance: 5°C/W Max.</p>	<table border="1"> <thead> <tr> <th>Dimension</th> <th>PAT3042P (English 1712)</th> <th>PAT3060P (English 2412)</th> </tr> </thead> <tbody> <tr> <td>L (Length)</td> <td>0.590 ±0.011</td> <td>0.512 ±0.011</td> </tr> <tr> <td>W (Width)</td> <td>0.165 ±0.011</td> <td>0.236 ±0.011</td> </tr> <tr> <td>H (Height)</td> <td>0.098 ±0.006</td> <td>0.098 ±0.006</td> </tr> <tr> <td>W2 (Lead Width)</td> <td>0.0157 ±0.004</td> <td>0.0157 ±0.004</td> </tr> </tbody> </table> <p>Note: Dimensions in inches</p>	Dimension	PAT3042P (English 1712)	PAT3060P (English 2412)	L (Length)	0.590 ±0.011	0.512 ±0.011	W (Width)	0.165 ±0.011	0.236 ±0.011	H (Height)	0.098 ±0.006	0.098 ±0.006	W2 (Lead Width)	0.0157 ±0.004	0.0157 ±0.004
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PAT P-Series Part Numbering: Ex: PAT3042P-C-10dB-A-B

Product Designator	Metric Size (English)	Impedance Code	Attenuation Value	Attenuation Tolerance	Packaging Quantity *
PAT	3042P (1712) 3060P (2412)	C = 50Ω	Either 3 or 4 digits as required (i.e. "3dB" = 3dB, "10dB" = 10dB)	A B (see electrical section for details)	-B = Bulk (see electrical section for offerings)

Examples:

Part Number	Metric Size (English size)	Attenuation Value	Attenuation Tolerance	Package Qty
PAT3042P-C-3dB-A-B	3042 (1712)	3dB	A (see electrical tables)	B = Bulk (50 pcs MOQ)
PAT3042P-C-10dB-A-B	3042 (1712)	10dB	A (see electrical tables)	B = Bulk (50 pcs MOQ)
PAT3060P-C-20dB-B-B	3060 (2412)	20dB	B (see electrical tables)	B = Bulk (50 pcs MOQ)

Electrical Specifications:

Type	PAT3042P		PAT3060P		
English Size	1712		2412		
Metric Size	3042		3060		
Frequency Range	DC ~ 10.0 GHz				
Impedance (code)	50Ω (C)				
Attenuation (dB)	0 ~ 10	16, 20	0 ~ 10	16, 20	
Attenuation Tolerance (± dB)	DC~<2GHz	A = ±0.1dB B = ±0.2dB	B = ±0.2dB	A = ±0.1dB B = ±0.2dB	B = ±0.2dB
	2~<5GHz	A = ±0.2dB B = ±0.3dB	B = ±0.3dB	A = ±0.2dB B = ±0.3dB	B = ±0.3dB
	5~10GHz	A = ±0.4dB B = ±0.5dB	B = ±0.5dB	A = ±0.4dB B = ±0.5dB	B = ±0.5dB
VSWR	DC~<2GHz	< 1.1			
	2~<5GHz	< 1.2			
	5~10GHz	< 1.3			
Rated Input Power	1W (max 5W with heat sink)		1.5W (max 10W with heat sink)		
Rated Ambient Temperature	70°C				
Operating Temperature	-55°C to 125°C				
Packaging (B=Bulk, T=Tape & Reel)	B = 50pcs minimum, increments of 1				

Derating: