Features

■PAT Series W type

· Single attenuating element realizes excellent attenuating characteristics

High Precision Chip Attenuator

- · Wide frequency range makes it possible to handle circuits with different frequency with ease
- The distribution of the terminals, signal terminals in the middle and ground terminal at ends, are designed for easy integration to coaxial connectors



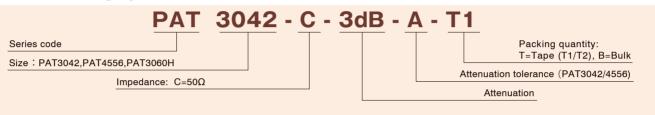




Applications

- · Attenuator for coaxial lines/circuit
- · Attenuator for measuring instrumentation

◆Part numbering system



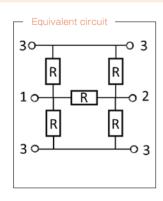
◆Electrical Specification

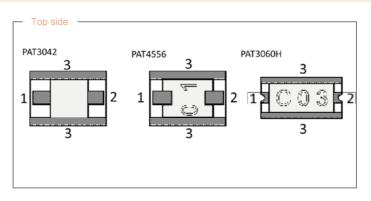
Туре	PAT3042	PAT4556	PAT3060H
Attenuation	0-10(1dB step), 16,20dB	0-10(1dB step), 13,16,20dB	1,2,3,5,6,10dB
Attenuation tolerance	Refer table1		±0.5dB
Impedance	50Ω(C) 50Ω(C)		50Ω(C)
VSWR	<1.1 (DC-2GHz) <1.2(2-5GHz), <1.3(5-10GHz)		<1.2
Operating frequency	DC ~ 10GHz		DC ~ 6GHz
Rated power	250mW	500mW	5W
Rated operating temperature	70°C		
Operating temperature	-55℃~+125℃		
Packaging quantity	50pcs/bag (B) 1,000pcs/reel (T1) 2,000pcs/reel (T2)	50pcs/bag (B) 1,000pcs/reel (T1)	100pcs/bag (B) 1,000pcs/reel (T1)

Attenuation tolerance				
Attenuuation*	Rank	DC~ 2GHz	2 ~ 5GHz	5 ~ 10GHz
0~10dB	A	±0.1dB	±0.2dB	±0.4dB
0~10dB	В	±0.2dB	±0.3dB	±0.5dB
16,20dB (13dB) **	В	±0.2dB	±0.3dB	±0.5dB

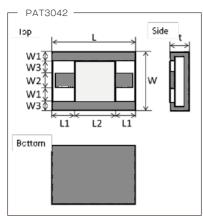
- * : Applicable products: PAT3042 and PAT4556
- ** : Applicable product is only PAT4556

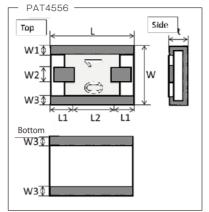
Equivalent Circuit and pin arrangement

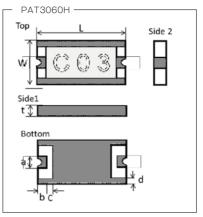




♦ Dimensions







Туре	PAT3042					
Size(inch)	1612					
Symbol	OdB	1dB	2,3dB	4,5,6dB	7,8,9,10dB	16,20dB
L	4.2±0.20					
W	3.0±0.20					
t	0.8±0.15					
W1	0.40±0.15	±0.15 0.30±0.15 0.40±0.15				
W2	0.66±0.10	0.66±0.10	0.90±0.10			
W3	0.77±0.10	0.85±0.10	0.65±0.10			
L1	_	1.90±0.20	1.90±0.20	1.75±0.20	1.60±0.20	1.15±0.20
L2	4.20±0.20	0.30±0.20	0.30±0.20	0.60±0.20	0.90±0.20	1.80±0.20

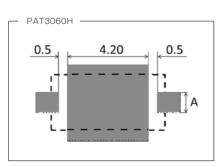
(unit: mm)

Туре	PAT4556		
Size(inch)	2218		
Symbol	OdB	1 ~ 20dB	
L	5.60±0.20		
W	4.50±0.20		
t	0.80±0.15		
W1	0.60±0.10		
W2	0.64±0.10	1.3±0.10	
W3	0.60±0.10		
		/	

Туре	PAT3060H
Size(inch)	2412
L	6.00±0.20
W	3.00±0.20
t	0.70±0.15
а	0.80±0.15
b	0.45±0.10
С	0.50±0.10
d	max 0.5

(unit:mm) (unit:mm)

♦ Recommended land patterns(soldering footprints)



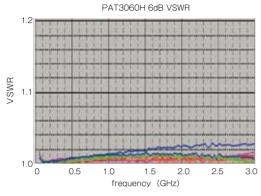
PCB material	Pattern A size
Glass epoxy t=0.6mm	1.07mm
Teflon t=0.6mm	1.52mm

 $[\]cdot$ Refer to the information on the next page on how to use PAT3042/PAT 4556

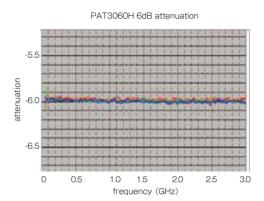
High Precision Chip Attenuator

■PAT Series W type

◆ High frequency characteristics (measured value)



Measured samples : 5pcs

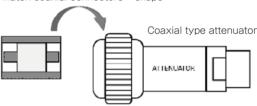


Measured samples: 5pcs

Mounting example

The shape of this attenuator chip is designed to match coaxial connectors' shape so that it can be integrated easily. In this case, the center conductor should be soldered to the signal terminals (the middle terminals) and metallic shield should be soldered to the ground terminals (the end terminals.)

This attenuator chip is designed to match coaxial connectors' shape



Derating Curve

