TAI-TECH Advanced Electronics Co., Ltd.

Ultra High Current Ferrite Beads

BPH Series

FAE Team

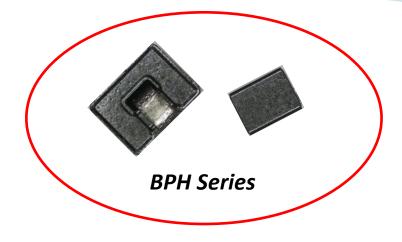




BPH Target Marketing



Desktop PC





Motor Driver



NoteBook PC

For Power EMI suppression



Power Supply



AP Router



LED-TV



SET-TOP-BOX

Why Used BPH Series















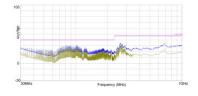




Replace Multilayer Bead

Improve Inrush Endurance

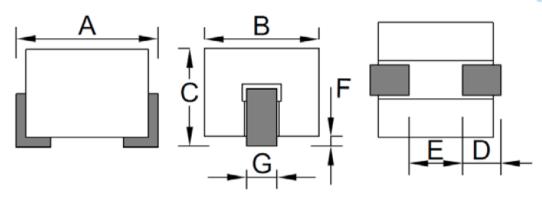




Increase Usage
Improve EMI

BHP Series Dimensions

Dimensi₀n

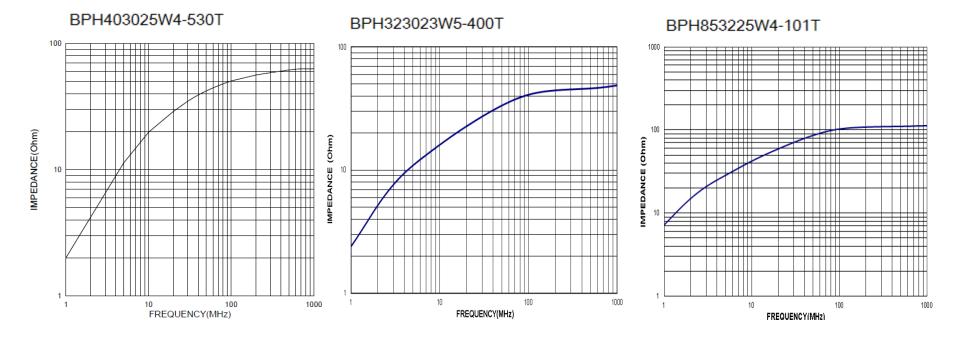




TAI-TECH	PRODUCT SIZE					
Part Number	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	
BPH853225W4-101T	9.0 ±0.40	3.1 ±0.15	2.8 ±0.25	1.50±0.50	1.25±0.20	
BPH323023W5-400T	3.08 ±0.15	2.9 ±0.10	2.20 ±0.10	0.8 ±0.20	0.85 ±0.10	
BPH403025W4-530T	4.30 ~ 5.10	3.1 ±0.15	2.70 ~ 3.1	1.35±0.20	1.35±0.15	

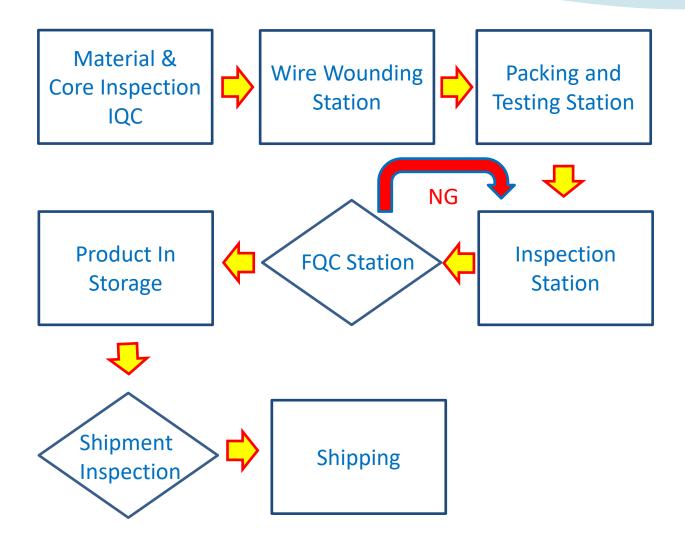
BPH Series Performance

	ELECTRICAL			ELECTRICAL			DCR	Rated Current(A)	
TAI-TECH Part Number	Impedance (Ω)	Tolerance (%)	Test Frequency (MHz)	Impedance (Ω)	Tolerance (%)	Test Frequency (MHz)	(mΩ) Max.	ΔT=40℃ TYP.	ΔT=60℃ TYP.
BPH403025W4-530T	35	±25	25	53	±25	100	0.6	35.0(1) 15.0(2)	45.0(1) 18.0(2)
BPH323023W5-400T	23	±25	25	40	±25	100	0.6	21.0(1) 15.0(2)	26.0(1) 18.0(2)
BPH853225W4-101T	65	±25	25	100	±25	100	1	35.0(1) 18.0(2)	45.0(1) 22.0(2)



BPH processing

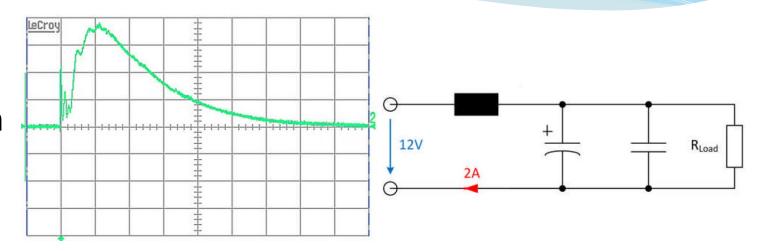
Product Procedure



BPH Inrush Simulation

BPH403025W4-530T Inrush Current Testing

Real Waveform



Simulation Waveform

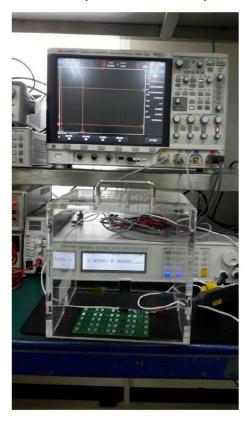


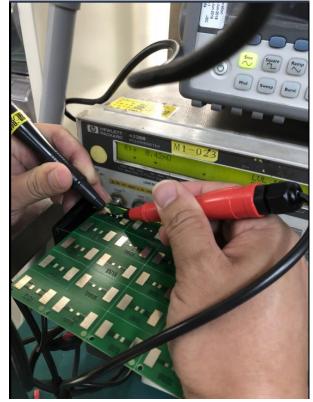
BPH Inrush Simulation result

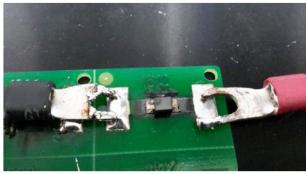
BPH403025W4-530T Inrush Current Testing

[Short time inrush test]

	Current	45A	45A	45A	45A	45A	45A
Time	(mS)	10	20	30	100	1000	5000
Situation	(Pass/fail)	PASS	PASS	PASS	PASS	PASS	PASS

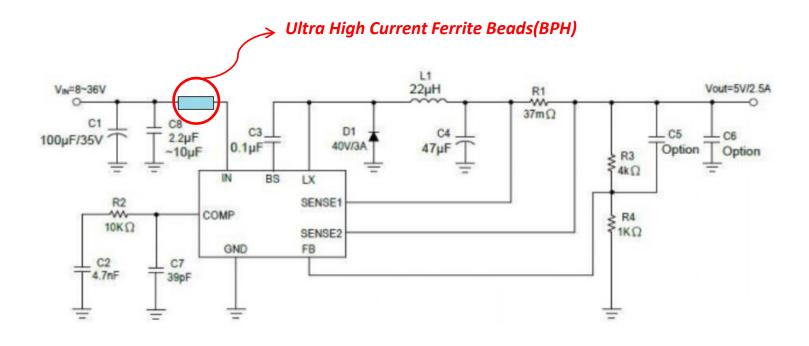






BPH Application As Input Choke

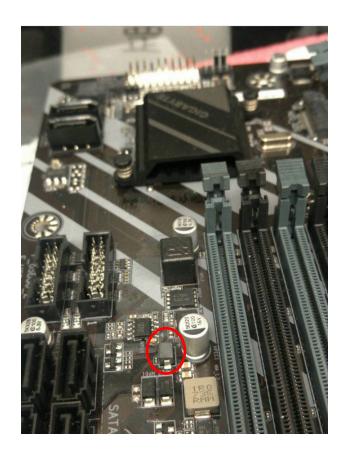
DC-DC Buck Product Application



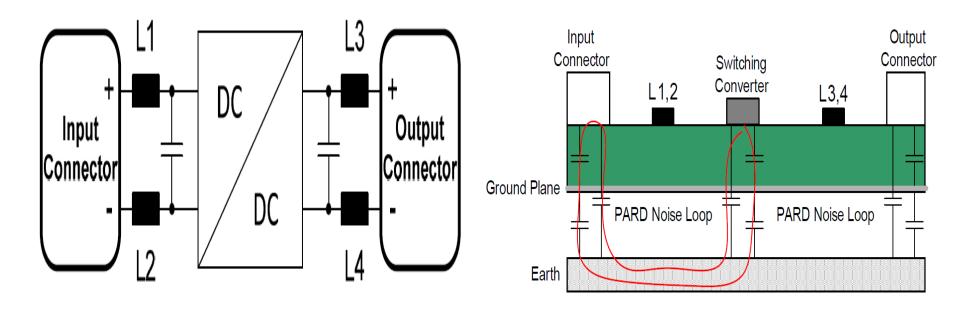
BPH Application As Input Choke Example

Customer's Application





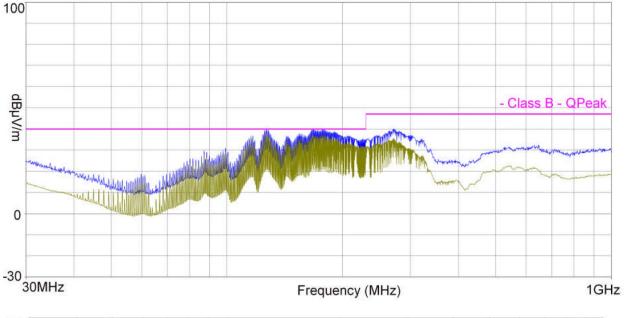
BPH Application As Input/Output Filter



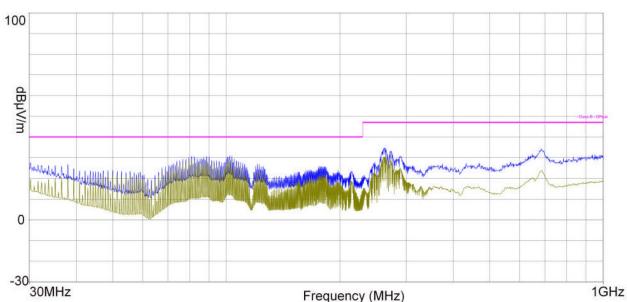
Again, in general ferrites should be placed as close as possible to the source of the noise because the noise couples into the unfiltered traces and cables. However, be aware that it is very likely that high frequency noise can couple around a ferrite via parasitic capacitance to GND and earth planes. Most EMC standards begin limiting radiated EMI at 30 MHz, so preventing this unwanted antenna effect of input and output leads is highly important. When a ground plane or a shielded enclosure is present, noise can couple around a ferrite placed towards the interior of a PCB

Input/Output Filter EMI effect example

Without Filter

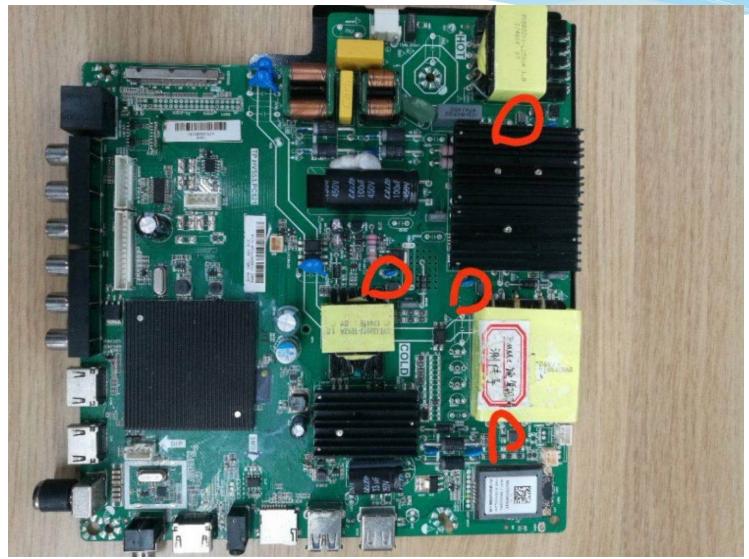


With Filter



BPH Application As Input/Output Filter Example

Customer's Application-TV Main Board



Contact



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