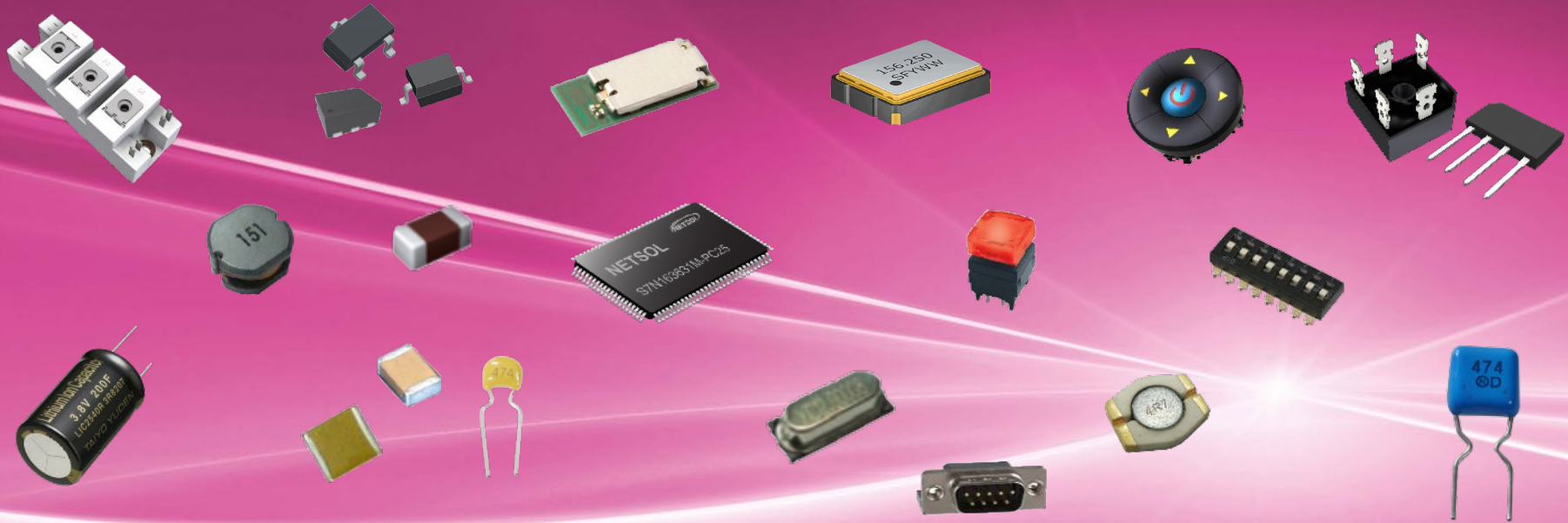


Wire Wound Power Inductor



Chilisin

15.10.2020

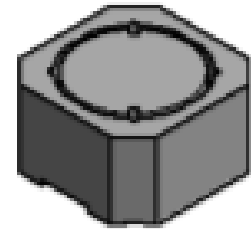
BPXX Series – Small Power WW Inductor

Features:

- WW Ferrite core Structure
- Good thermal aging
- 180C wire, good weather resistance
- Frameless Electrode Plating Terminals
- Low Profile
- Inductance 0.1uH-1500uH
- Dimensions 3*3, 4*4, 5*5, 6*6,
- Current Rating 0.1A-5A
- AEC-Q200 Grade available

Applications:

- Small Power DCDC
- Motor Drive, Robotic
- LED lighting
- IoT
- Others



Electrical Characteristics (partial list)

Series	Dimensions(mm)			Inductance(uH) @100kHz/0.1V	Tolerance (±%)	RDC(Ω) Max.	I _{rms} (A) Max.	I _{sat} (A) Max.
	L	W	T					
BPXX00030315	3.0	3.0	1.5	1.0~100	±20%	0.075~3.4	0.26~2.0	0.23~2.0
BPXX00040418	4.0	4.0	1.8	0.3~470	±20%	0.030~7.0	0.20~2.8	0.14~4.8
BPXX00050530	5.0	5.0	3.0	1.2~1000	±20%	0.040~5.0	0.25~2.65	0.11~3.5
BPXX00060635	6.0	6.0	3.5	10~1500	±20%	0.010~4.6	0.26~1.8	0.12~2.3

BPCT Series – WW Ferrite Inductor, High Power

Features:

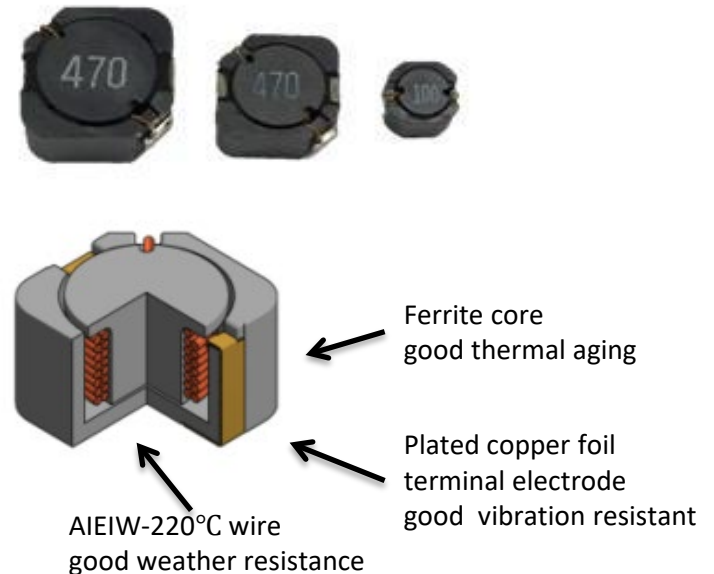
- AEC-Q200 compliant
- WW Ferrite core structure
- AIEIW-220C wire
- Inductance from 1uH – 470uH
- Current Rating 0.5A – 12A
- Available in 6x6, 7.5x7.5, 10x10, 12x12mm

Applications:

- Medium/High Power DCDC
- Car navigation, electronic power steering
- Infotainment , LED lights
- Others

Electrical Characteristics (partial list)

Series	Dimensions(mm)			Inductance(uH) @Test frequency	Tolerance (±%)	RDC(Ω) Max.	I _{rms} (A) Max.	I _{sat} (A) Max.
	L	W	T					
A(B)PCT_060645_A0	6.2	6.0	4.5	1.0~10 @100KHz	M,N	14.3m ~ 42m	2.6 ~ 4.8	2.1 ~ 6.7
A(B)PCT_080845_A0	7.5	7.5	4.5	1.0~10 @100KHz	M,N	11.7m ~ 42.9m	3.1 ~ 6.5	3.0 ~ 8.5
A(B)PCT_101065_A0	10.3	10	6.5	1.0~470@100KHz	M,N	5.4m ~ 0.6 Typ.	0.9 ~ 10.5	0.6 ~ 11.5
A(B)PCT_121280_A0	12.5	12.3	8.0	6.8~470@100KHz	M,N	10m ~ 0.59 Typ.	1.1 ~ 8.5	1.0 ~ 7.3



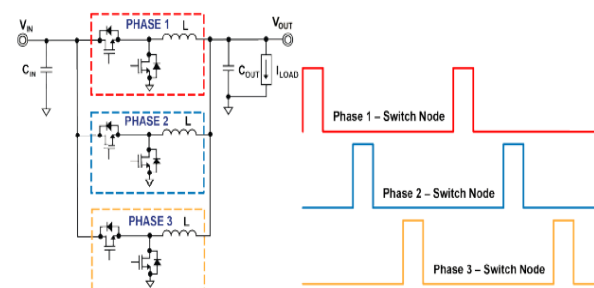
BPMI Series – High Isat Staple Inductor

Features:

- Ferrite Material, Mn-Zn
- High flux density core
- Copper foil for low DCR designs
- No thermal aging effects

Applications:

- Distributed Power System for Output Current
- Data center, Server , FPGA, VGA V-core



Multiphase Regulator Example

Electrical Characteristics (partial list)

Series	Dimensions(mm)			Inductance(nH) @100kHz	Tolerance (±%)	RDC(Ω)	I _{rms} (A) Max.	I _{sat} (A) Max.
	L	W	T					
APMI-040440	3.8	3.8	3.8	22~65	L,M,N	0.25m~0.4m	19~35	13~40
APMI-060680	5.7	5.7	7.5	100~200	M,N	0.25m	35	22~40
APMI-070750	7.0	7.0	4.96	72~220	M,N	0.32m	31	20~58
APMI-090680	9.6	6.4	8.0	120~400	K,M	0.29m	51	21~80
APMI-100875	10.41	7.9	7.5	115~230	K,M	0.29m	41	43~94
APMI-100880	10.0	8.0	8.00	120~270	K,M	0.18m	70	44~95
APMI-131380	13.2	12.7	7.5	110~440	M,N	0.32m	55	37~120

AFDI Series – High Power Inductor, Through Hole

Features:

- Molding Structure, through hole
- Shielded, minimum EMI interferences
- Inductance 0.47uH-120uH
- High current capability, Isat up to 65A
- Low RDC
- Certified to AEC-Q200 standard
- Operating Temp -55C to 155C
- Compatible with Vishay IHTH

Applications:

- Desktop, Server, High power density DCDC
- Automotive
- Engine and Transmission Control Unit
- Battery Powered devices
- Replacement for Iron Powder Toroid choke



AFDI19



AFDI30



Electrical Characteristics vs. Vishay IHTH

Part Number	Inductors(uH)	RDC(mΩ)	Isat(A)	Irms(A)
Chilisin(AFDI00303012101M04)	100	30.8 max	9	11
Vishay(IHTH-1125MZEB-5A 100uH)	100	32.2 max	6	8.8
Chilisin(AFDI00202010101M01)	100	62 max	9	5.8
Vishay(IHTH-0750JZ-5A 100uH)	100	64 max	5.9	4.9
Chilisin(AFDI00191909470M06)	47	35.6 max	9	8
Vishay(IHTH-0750IZ-5A 47uH)	47	37.2 max	6.8	6.5
Chilisin(AFDI002828118R2M06)	8.2	2.9 max	34	37
Vishay(IHTH-1125KZ-51 8.2uH)	8.2	3 max	32	34.5

Wire Wound Inductor - Cross Reference

Type	Application	Chilisin	Murata	TDK	Taiyo Yuden	Sumida	Coilcraft	Vishay	Pulse
Wire-wound Shielded Power Inductor	Large current	BWMR		VLS-HBX	MAKK MDKK				
	Standard	BWVS	LQHxxP	VLS-E	NR NRH NRS			IFSC	
	Low DC Resistance	BWVC/BWVF/BWVT/BWVH	LQHxxMC LQHxxPN	VLS VLCF VLP	NRH NRS NRV			IFSC	
	Large current	BPSx							PA
		BPSP					SER		
	Standard	BPSS			LTF				
		BPSC					CDRH	MSS MSD	
		BPSF			SLF	NS	CDRR		
		BPST						DT	
		BPSY						DS DD	IDSC
Wire-wound Unshielded	Standard	BPSD				CD		IDCP	
		BPSL				CDR	DO	IDC	

Your contact person for Wire Wound Power Inductor

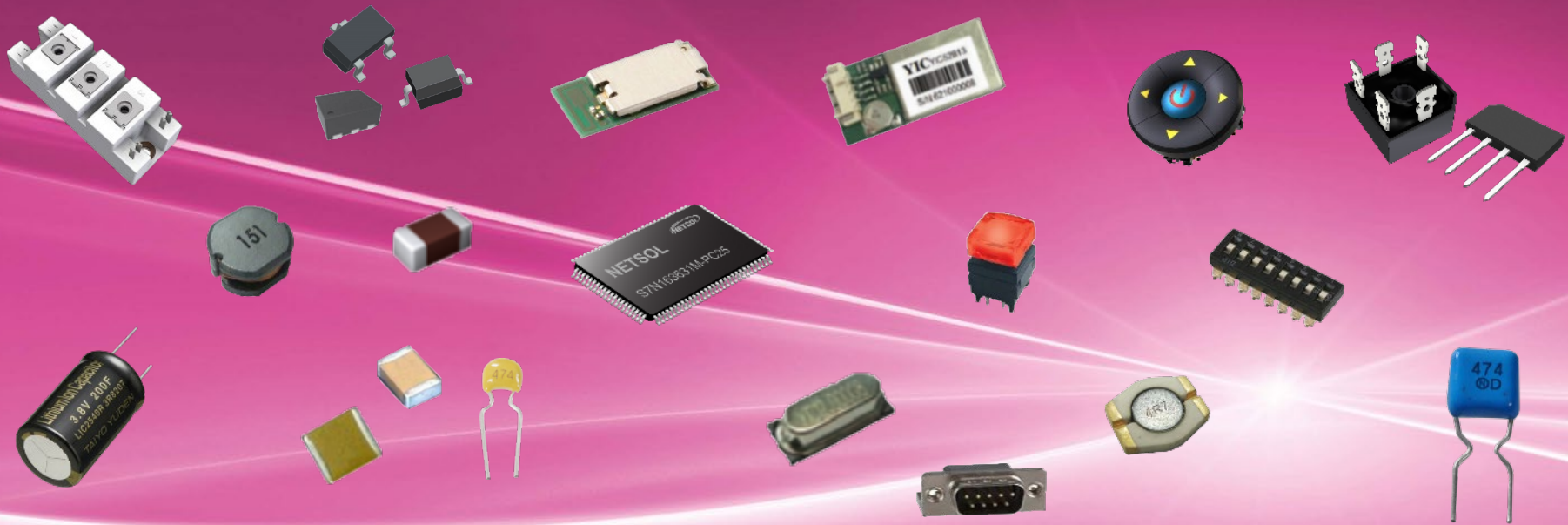


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Thank You !



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