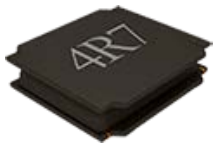
Wire Wound SMD Power Inductors – WPN Series

Operating temperature range : -40℃~+125℃ (Including self-heating)



FEATURES

- Fe base metal material core provides large saturation current
- Metallization on ferrite core results in excellent shock resistance and damage-free durability
- Closed magnetic circuit design reduces leakage flux and Electro Magnetic Interference (EMI)
- Low DCR decreases power loss, small and slim take up less PCB real estate
- Automatic production ensures high quality and consistency

APPLICATIONS

- Smart phone, set top box, VR, AR
- Notebooks, desktop computers, servers
- Portable gaming devices, personal navigation systems, personal multimedia devices

PRODUCT IDENTIFICATION

WPN	252012	H	2R2	M	T	□□□
①	②	③	④	⑤	⑥	⑦

① Type	
WPN	Wire Wound SMD Power Inductor

② External Dimensions (L×W×H) [mm]	
201610	2.0×1.6×1.0
201612	2.0×1.6×1.2
252010	2.5×2.0×1.0
252012	2.5×2.0×1.2
3010	3.0×3.0×1.0
3012	3.0×3.0×1.2
4010	4.0×4.0×1.0
4012	4.0×4.0×1.2
4020	4.0×4.0×2.0

③ Feature Type	
H	H Type
M	M Type
U	U Type
UF	UF Type
E	E Type
HS	HS Type
F	F Type

④ Nominal Inductance	
Example	Nominal Value
R47	0.47μH
2R2	2.2μH

⑤ Inductance Tolerance	
N	±30%
M	±20%

⑥ Packing	
T	Tape & Reel

⑦ Design Code	
□□□	Design Code
* Standard product is blank	

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SHAPE AND DIMENSIONS

Fig.1

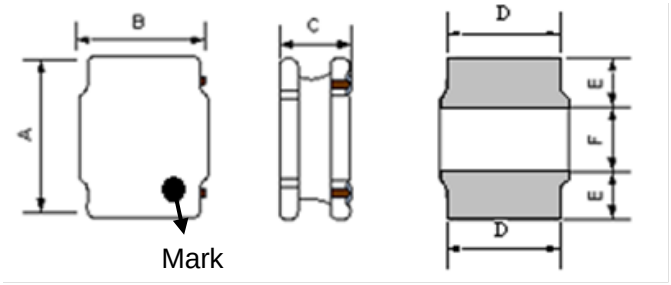


Fig.2

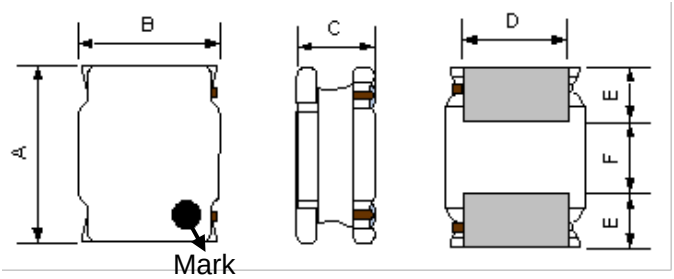


Fig.3

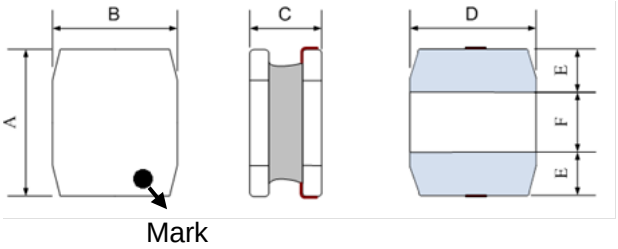


Fig.4

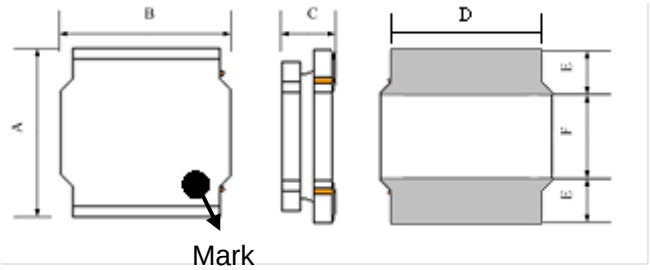
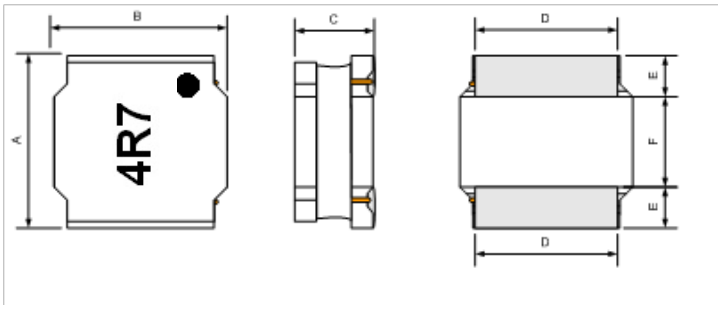
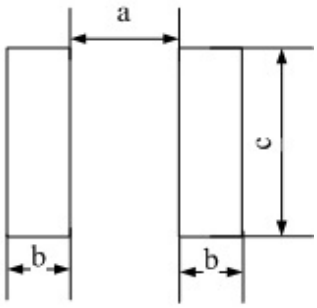


Fig.5



Recommended Land Pattern



Unit: mm

Series	Shape	A	B	C	D	E	F	a Typ.	b Typ.	c Typ.
WPN201610H/HS/F	Fig.1	2.0±0.2	1.6±0.2	1.0 Max.	1.5±0.2	0.6±0.2	0.8±0.2	0.7	0.7	1.7
WPN201610M	Fig.2	2.0±0.2	1.6±0.2	1.0 Max.	1.2±0.2	0.6±0.2	0.8±0.2	0.7	0.7	1.7
WPN201610U/UF	Fig.3	2.0±0.2	1.6±0.2	1.0 Max.	1.6±0.2	0.6±0.2	0.8±0.2	0.7	0.7	1.7
WPN201612H	Fig.1	2.0±0.2	1.6±0.2	1.2 Max.	1.2±0.2	0.6±0.2	0.8±0.2	0.7	0.7	1.7
WPN252010H/HS/F	Fig.1	2.5±0.2	2.0±0.2	1.0 Max.	1.65±0.2	0.8±0.2	0.8±0.2	0.8	0.85	2.0
WPN252010U/UF	Fig.3	2.5±0.2	2.0±0.2	1.0 Max.	2.0±0.2	0.6±0.2	1.3±0.2	1.20	0.80	2.0
WPN252012H/HS	Fig.1	2.5±0.2	2.0±0.2	1.2 Max.	1.65±0.2	0.8±0.2	0.8±0.2	0.8	0.85	2.0
WPN252012E	Fig.1	2.5±0.2	2.0±0.2	1.2 Max.	1.65±0.2	0.8±0.2	0.8±0.2	0.8	0.85	2.0
WPN3010HS	Fig.4	3.0±0.2	3.0±0.2	1.0 Max.	2.6±0.2	0.75±0.2	1.5±0.2	1.5	0.8	3.2
WPN3012H/HS	Fig.4	3.0±0.2	3.0±0.2	1.2 Max.	2.6±0.2	0.75±0.2	1.5±0.2	1.5	0.8	3.2
WPN4010HS	Fig.5	4.0±0.2	4.0±0.2	1.0 Max.	3.1±0.2	0.95±0.2	2.1±0.2	1.9	1.1	3.7
WPN4012H/HS	Fig.5	4.0±0.2	4.0±0.2	1.2 Max.	3.1±0.2	0.95±0.2	2.1±0.2	1.9	1.1	3.7
WPN4020H	Fig.5	4.0±0.2	4.0±0.2	2.0 Max.	3.1±0.2	0.95±0.2	2.1±0.2	1.9	1.1	3.7

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SPECIFICATIONS

WPN201210UF Series (**Not recommended for new design**)

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN201210UFR24MT	0.24±20%	0.026	0.021	100	6.00	6.80	4.80	5.50
WPN201210UF1R0MTY01	1.0±20%	0.070	0.060	45	3.00	3.20	2.80	3.20

WPN201608UF Series (**Not recommended for new design**)

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN201608UFR47MTB01	0.47±20%	0.030	0.025	85	4.30	4.70	4.60	5.30
WPN201608UF1R0MT	1.0±20%	0.080	0.070	46	4.10	4.60	2.80	3.20

WPN201610H Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN201610HR24MT	0.24±20%	0.040	0.033	145	4.50	5.50	3.00	3.45
WPN201610HR47MT	0.47±20%	0.049	0.041	102	4.00	4.70	2.70	3.10
WPN201610HR68MT	0.68±20%	0.065	0.057	77	3.50	4.00	2.50	2.80
WPN201610H1R0MT	1.0±20%	0.090	0.075	70	3.35	3.85	2.05	2.35
WPN201610H1R0MTY01	1.0±20%	0.070	0.060	65	2.60	3.05	2.20	2.55
WPN201610H1R5MT	1.5±20%	0.130	0.110	45	1.95	2.30	1.70	2.00
WPN201610H2R2MT	2.2±20%	0.170	0.142	39	1.90	2.15	1.45	1.70
WPN201610H4R7MT	4.7±20%	0.425	0.370	25	1.20	1.50	0.90	1.00
WPN201610H100MT	10±20%	0.826	0.688	15	0.80	0.95	0.65	0.75

WPN201610HS Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN201610HS4R7MT	4.7±20%	0.425	0.370	25	1.50	1.70	0.90	1.00
WPN201610HS100MT	10±20%	0.826	0.688	15	0.95	1.10	0.65	0.75

WPN201610M Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN201610MR24MT	0.24±20%	0.026	0.022	160	5.90	6.80	4.35	4.80
WPN201610MR33MT	0.33±20%	0.038	0.032	120	5.50	6.00	3.40	3.80
WPN201610MR47MT	0.47±20%	0.044	0.037	107	4.30	5.20	3.00	3.30
WPN201610MR68MT	0.68±20%	0.060	0.050	92	3.60	4.20	2.60	3.00
WPN201610M1R0MT	1.0±20%	0.090	0.075	52	3.35	3.85	2.05	2.35
WPN201610M2R2MT	2.2±20%	0.160	0.135	41	1.80	2.00	1.60	1.75

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SPECIFICATIONS

WPN201610F Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN201610F2R2MTY01	2.20±20%	0.152	0.142	39	2.40	2.60	1.80	2.00

WPN201610U Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN201610UR12MT	0.12±20%	0.015	0.012	250	9.50	11.00	5.60	6.50
WPN201610UR33MT	0.33±20%	0.025	0.022	121	5.50	6.00	4.10	4.70
WPN201610UR47MT	0.47±20%	0.033	0.028	110	4.50	5.00	3.60	4.10
WPN201610UR47MTY03	0.47±20%	0.033	0.028	110	4.70	5.00	4.10	4.70
WPN201610UR68MT	0.68±20%	0.045	0.037	78	3.20	3.70	3.10	3.60
WPN201610U1R0MT	1.0±20%	0.060	0.050	63	3.00	3.50	2.60	3.00
WPN201610U1R0MTY01	1.0±20%	0.060	0.050	63	3.60	3.80	3.10	3.40
WPN201610U1R5MT	1.5±20%	0.110	0.095	50	2.80	3.20	2.00	2.30
WPN201610U2R2MT	2.2±20%	0.120	0.100	44	1.80	2.10	1.90	2.20
WPN201610U2R2MTY01	2.2±20%	0.138	0.115	44	2.40	2.60	2.00	2.20

WPN201610UF Series (**Not recommended for new design**)

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN201610UFR47MT	0.47±20%	0.025	0.022	110	5.50	6.00	4.80	5.50
WPN201610UF1R0MT	1.0±20%	0.055	0.047	63	4.00	4.50	3.65	4.20
WPN201610UF1R5MT	1.5±20%	0.083	0.073	34	3.00	3.40	2.75	3.15
WPN201610UF2R2MT	2.2±20%	0.100	0.093	28	2.70	3.00	2.45	2.80

WPN201612H Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN201612HR24MT	0.24±20%	0.023	0.019	116	5.85	6.75	4.50	5.20
WPN201612HR33MT	0.33±20%	0.031	0.026	95	5.15	6.00	3.85	4.45
WPN201612HR47MT	0.47±20%	0.041	0.034	84	3.95	4.60	3.40	3.90
WPN201612H1R5MT	1.5±20%	0.109	0.091	42	1.90	2.35	2.10	2.45
WPN201612H2R2MT	2.2±20%	0.146	0.122	32	1.70	2.00	1.80	2.05

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SPECIFICATIONS

WPN252010H Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN252010HR33MT	0.33±20%	0.039	0.033	117	4.80	5.50	3.50	4.05
WPN252010HR47MT	0.47±20%	0.045	0.038	80	4.40	5.20	3.20	3.70
WPN252010HR68MT	0.68±20%	0.059	0.049	65	3.20	3.60	2.75	3.20
WPN252010H1R0MT	1.0±20%	0.076	0.063	46	3.10	3.50	2.50	2.90
WPN252010H1R5MT	1.5±20%	0.106	0.088	40	2.60	3.00	2.00	2.30
WPN252010H2R2MT	2.2±20%	0.155	0.129	26	1.90	2.20	1.50	1.80
WPN252010H3R3MT	3.3±20%	0.235	0.196	24	1.60	1.80	1.20	1.40
WPN252010H4R7MT	4.7±20%	0.276	0.230	19	1.30	1.50	1.10	1.30
WPN252010H100MT	10±20%	0.500	0.435	12	0.90	1.00	0.80	0.90

WPN252010HS Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN252010HS4R7MT	4.7±20%	0.276	0.230	19	1.30	1.50	1.10	1.30
WPN252010HS4R7MTY01	4.7±20%	0.290	0.250	19	1.55	1.80	1.05	1.20
WPN252010HS100MT	10±20%	0.500	0.435	12	1.10	1.30	0.80	0.90
WPN252010HS100MTY01	10±20%	0.500	0.435	12	1.30	1.50	0.90	1.05

WPN252010U Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN252010UR16MT	0.16±20%	0.020	0.016	214	10.0	12.0	5.00	5.80
WPN252010UR24MT	0.24±20%	0.025	0.021	149	8.50	10.0	4.40	5.10
WPN252010UR33MT	0.33±20%	0.025	0.021	117	6.00	6.70	4.40	5.10
WPN252010UR33MTY01	0.33±20%	0.030	0.025	100	6.80	7.60	4.00	4.60
WPN252010UR33MTY02	0.33±20%	0.030	0.025	100	8.50	9.50	4.00	4.60
WPN252010UR47MT	0.47±20%	0.030	0.025	92	5.30	5.80	4.00	4.60
WPN252010UR68MT	0.68±20%	0.043	0.036	67	5.20	5.70	3.30	3.80
WPN252010U1R0MT	1.0±20%	0.050	0.042	54	4.10	4.60	3.10	3.60
WPN252010U1R0MTY01	1.0±20%	0.060	0.050	62	4.90	5.60	3.00	3.50
WPN252010U1R5MT	1.5±20%	0.076	0.063	41	3.00	3.40	2.40	2.80
WPN252010U2R2MT	2.2±20%	0.096	0.080	34	2.60	2.90	2.05	2.40
WPN252010U4R7MT	4.7±20%	0.240	0.200	22	1.90	2.20	1.40	1.60

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SPECIFICATIONS

WPN252010UF Series (**Not recommended for new design**)

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN252010UFR47MT	0.47±20%	0.019	0.017	90	6.00	6.60	6.70	7.50
WPN252010UFR68MT	0.68±20%	0.032	0.027	65	5.40	6.20	4.80	5.50
WPN252010UF1R0MT	1.0±20%	0.038	0.032	46	4.70	5.20	4.50	5.20
WPN252010UF1R5MT	1.5±20%	0.054	0.045	40	2.80	3.20	3.60	4.20
WPN252010UF2R2MT	2.2±20%	0.070	0.064	30	2.80	3.10	3.10	3.60
WPN252010UF2R2MTY01	2.2±20%	0.085	0.071	28	3.20	3.50	2.90	3.30

WPN252012H Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN252012HR24MT	0.24±20%	0.023	0.019	117	6.50	7.80	4.05	4.70
WPN252012HR33MT	0.33±20%	0.028	0.023	104	5.30	6.20	3.70	4.30
WPN252012HR47MT	0.47±20%	0.035	0.029	89	4.90	5.60	3.45	4.00
WPN252012HR68MT	0.68±20%	0.043	0.036	67	3.70	4.30	3.15	3.60
WPN252012H1R0MT	1.0±20%	0.054	0.048	52	3.60	4.20	3.00	3.40
WPN252012H1R5MT	1.5±20%	0.072	0.060	38	2.90	3.50	2.40	2.80
WPN252012H2R2MT	2.2±20%	0.120	0.100	32	2.60	3.00	1.90	2.15
WPN252012H2R2MTY01	2.2±20%	0.102	0.085	36	2.30	2.70	2.10	2.40
WPN252012H3R3MT	3.3±20%	0.163	0.136	25	1.70	2.10	1.80	2.05
WPN252012H4R7MT	4.7±20%	0.260	0.225	23	1.60	1.90	1.25	1.45
WPN252012H6R8MT	6.8±20%	0.366	0.305	16	1.15	1.35	0.95	1.10
WPN252012H100MT	10±20%	0.480	0.435	14	1.10	1.35	0.85	1.00

WPN252012HS Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN252012HS4R7MT	4.7±20%	0.260	0.225	23	1.70	1.90	1.25	1.45
WPN252012HS100MT	10±20%	0.480	0.435	14	1.10	1.35	0.85	1.00

WPN252012E Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN252012ER33MT	0.33±20%	0.026	0.020	107	8.00	9.00	4.50	5.10
WPN252012ER47MT	0.47±20%	0.032	0.026	92	7.00	8.00	4.10	4.70
WPN252012E1R0MT	1.0±20%	0.044	0.037	52	4.50	5.00	3.50	3.90

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SPECIFICATIONS

WPN3010HS Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN3010HS100MT	10±20%	0.432	0.360	16	1.00	1.20	1.20	1.40

WPN3012H Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN3012HR33MT	0.33±20%	0.027	0.023	107	7.20	8.90	4.20	4.85
WPN3012HR47MT	0.47±20%	0.033	0.028	86	6.80	8.00	3.90	4.50
WPN3012HR68MT	0.68±20%	0.042	0.035	63	5.80	6.80	3.40	3.90
WPN3012H1R0MT	1.0±20%	0.054	0.045	51	4.20	5.40	2.70	3.10
WPN3012H1R5MT	1.5±20%	0.074	0.064	37	3.40	4.10	2.50	2.90
WPN3012H2R2MT	2.2±20%	0.108	0.090	28	2.80	3.35	2.05	2.35
WPN3012H3R3MT	3.3±20%	0.155	0.129	25	2.20	2.60	1.70	2.00
WPN3012H4R7MT	4.7±20%	0.235	0.196	20	2.00	2.50	1.30	1.50
WPN3012H6R8MT	6.8±20%	0.340	0.290	16	1.60	1.90	1.10	1.25
WPN3012H100MT	10±20%	0.474	0.395	12	1.20	1.45	1.00	1.15

WPN3012HS Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN3012HS4R7MT	4.7±20%	0.235	0.196	20	2.00	2.50	1.30	1.50
WPN3012HS6R8MT	6.8±20%	0.312	0.260	21	2.40	2.70	1.10	1.25
WPN3012HS100MT	10±20%	0.474	0.395	12	1.35	1.65	1.00	1.15
WPN3012HS100MTY01	10±20%	0.415	0.360	17	1.90	2.15	1.35	1.55
WPN3012HS150MT	15±20%	0.635	0.550	13	1.55	1.75	1.10	1.25

WPN4010HS Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN4010HS100MT	10±20%	0.335	0.280	10	1.40	1.65	1.40	1.65

WPN4012H Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN4012HR33MT	0.33±20%	0.032	0.027	113	10.30	11.50	4.30	4.90
WPN4012HR47MT	0.47±20%	0.041	0.034	96	9.10	9.90	3.80	4.40
WPN4012HR68MT	0.68±20%	0.041	0.034	70	5.50	6.35	3.80	4.40
WPN4012H1R0MT	1.0±20%	0.059	0.049	55	5.70	6.60	3.20	3.70

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SPECIFICATIONS

WPN4012H/HS Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN4012H1R0MTY01	1.0±20%	0.049	0.041	56	4.50	5.30	3.60	4.20
WPN4012H1R2MT	1.2±20%	0.059	0.049	48	4.00	4.80	3.20	3.70
WPN4012H1R5MT	1.5±20%	0.070	0.058	38	3.90	4.60	2.90	3.30
WPN4012H2R2MT	2.2±20%	0.079	0.066	28	2.80	3.30	2.70	3.10
WPN4012H3R3MT	3.3±20%	0.125	0.104	23	2.80	3.30	2.10	2.50
WPN4012H4R7MT	4.7±20%	0.166	0.138	19	2.30	2.60	1.90	2.20
WPN4012H6R8MT	6.8±20%	0.226	0.188	17	1.60	2.20	1.60	1.85
WPN4012H100MT	10±20%	0.335	0.279	12	1.55	1.85	1.30	1.50
WPN4012H220MT	22±20%	0.679	0.566	7	1.05	1.30	0.90	1.05
WPN4012HS4R7MT	4.7±20%	0.162	0.135	28	2.60	3.00	2.05	2.35
WPN4012HS100MT	10±20%	0.276	0.230	12	1.80	2.10	1.55	1.75

WPN4020H Series

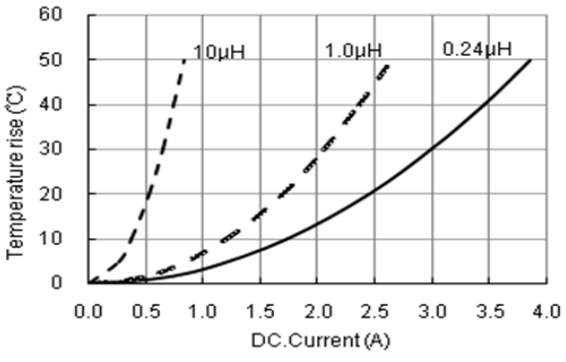
Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current		Heat Rating Current	
	@1MHz	Max.	Typ.	Min.	Max.	Typ.	Max.	Typ.
Units	μH	Ω		MHz	A		A	
Symbol	L	DCR		S.R.F	Isat		Irms	
WPN4020HR22MT	0.22±20%	0.013	0.011	108	18.70	22.00	8.20	9.50
WPN4020HR47MT	0.47±20%	0.022	0.018	72	13.40	15.50	6.40	7.40
WPN4020HR68MT	0.68±20%	0.022	0.018	57	8.70	11.10	6.40	7.40
WPN4020H1R0MT	1.0±20%	0.026	0.022	37	8.70	11.10	5.80	6.70
WPN4020H1R5MT	1.5±20%	0.036	0.030	30	7.70	9.60	5.20	6.00
WPN4020H2R2MT	2.2±20%	0.048	0.040	25	6.10	7.60	4.30	5.00
WPN4020H3R3MT	3.3±20%	0.072	0.060	19	4.70	5.90	3.45	4.00
WPN4020H4R7MT	4.7±20%	0.108	0.090	17	4.00	4.90	2.85	3.30
WPN4020H6R8MT	6.8±20%	0.156	0.130	13	3.00	4.20	2.40	2.80
WPN4020H100MT	10±20%	0.216	0.180	11	2.80	3.50	2.00	2.35

※1: All test data is referenced to 20°C ambient;
※2: Rated current: Isat or Irms, whichever is smaller;
※3: For WPN2016 & WPN2520 size inductors, absolute maximum voltage: DC 25V; For WPN30 & WPN40 size inductors, absolute maximum voltage: DC 40V;
※Isat: DC current at which the inductance drops approximate 30% from its value without current;
※Irms: DC current that causes the temperature rise (△T =40°C) from 20°C ambient.
※WPN-HS series is processed with surface coating technology, coated by the resin of high voltage insulation level coating on the core surface evenly by automatic equipment, to improve the voltage insulation and corrosion resistance of the core.

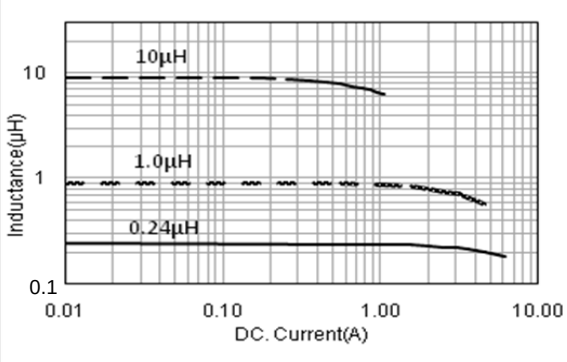
TYPICAL ELECTRICAL CHARACTERISTICS

WPN201610H Series

Temperature vs. DC Current Characteristics



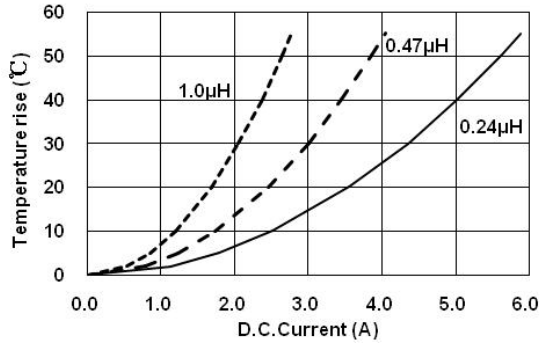
Inductance vs. DC Current Characteristics



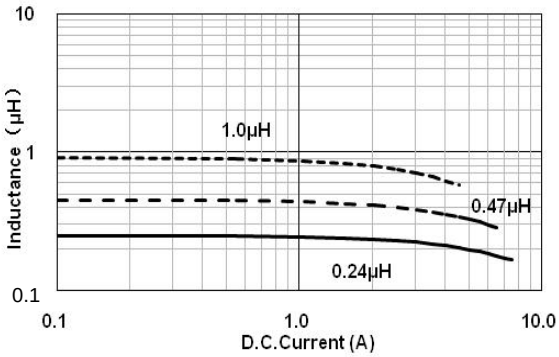
TYPICAL ELECTRICAL CHARACTERISTICS

WPN201610M Series

Temperature vs. DC Current Characteristics

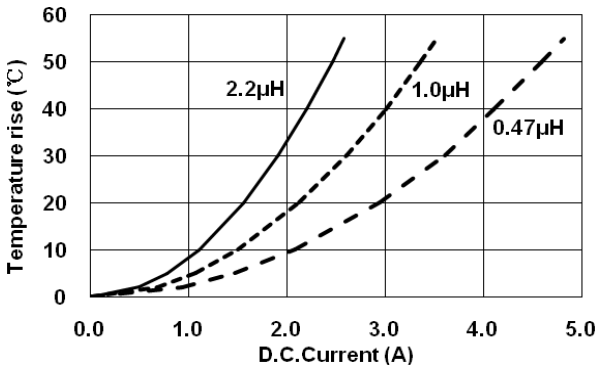


Inductance vs. DC Current Characteristics

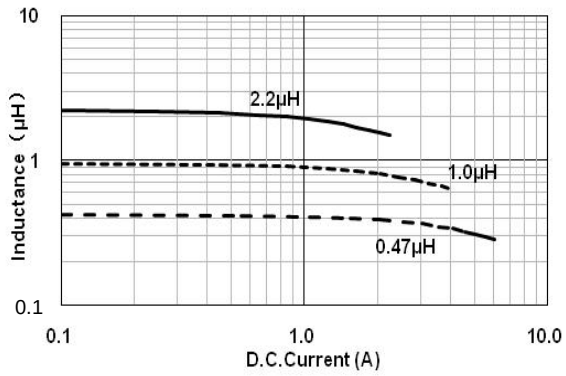


WPN201610U Series

Temperature vs. DC Current Characteristics

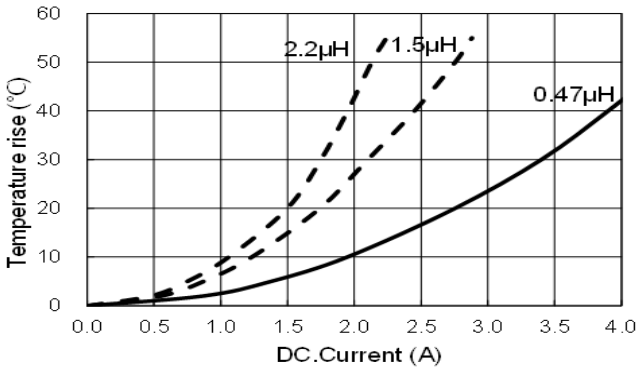


Inductance vs. DC Current Characteristics

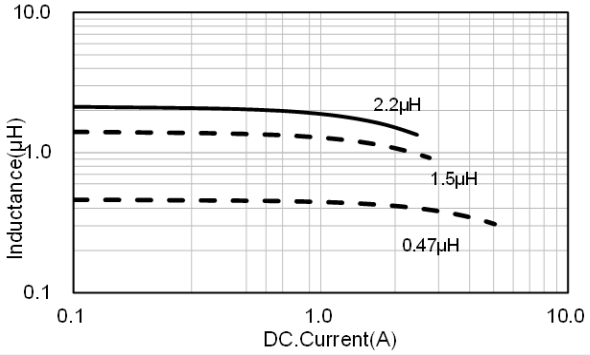


WPN201612H Series

Temperature vs. DC Current Characteristics

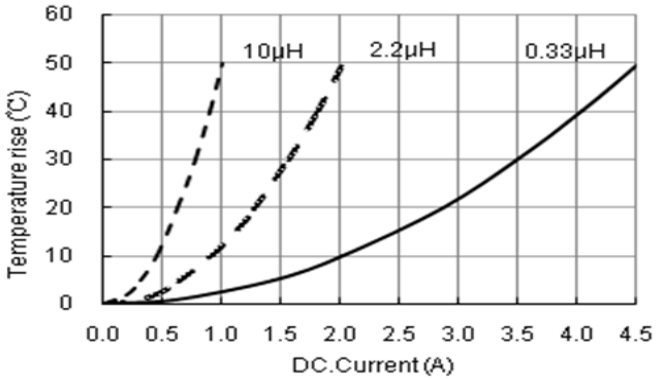


Inductance vs. DC Current Characteristics

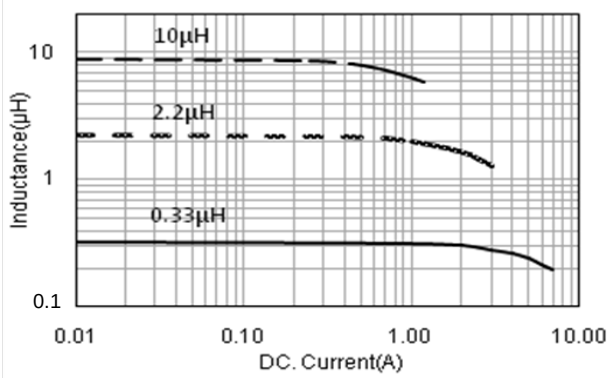


WPN252010H Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

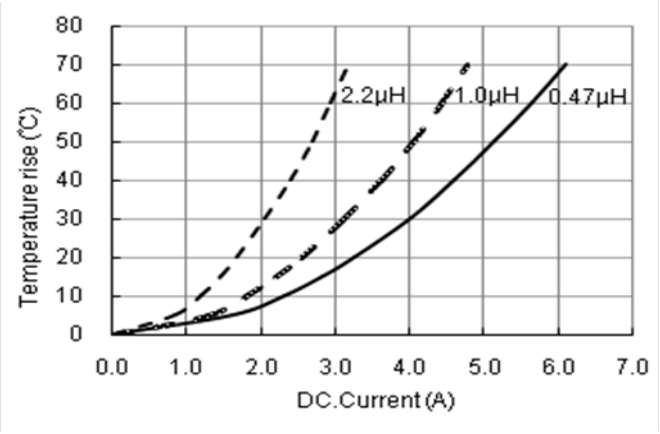


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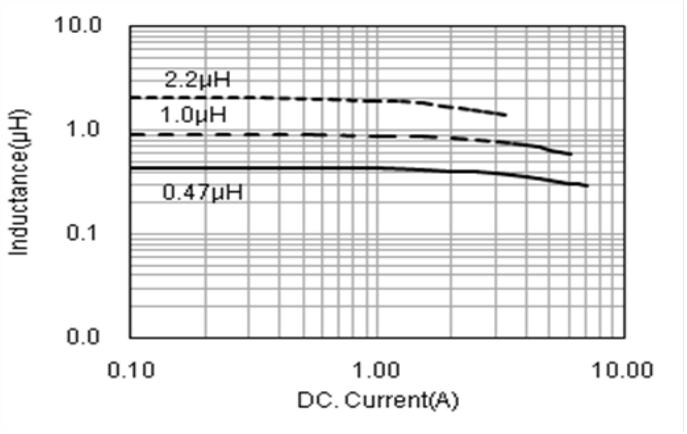
TYPICAL ELECTRICAL CHARACTERISTICS

WPN252010U Series

Temperature vs. DC Current Characteristics

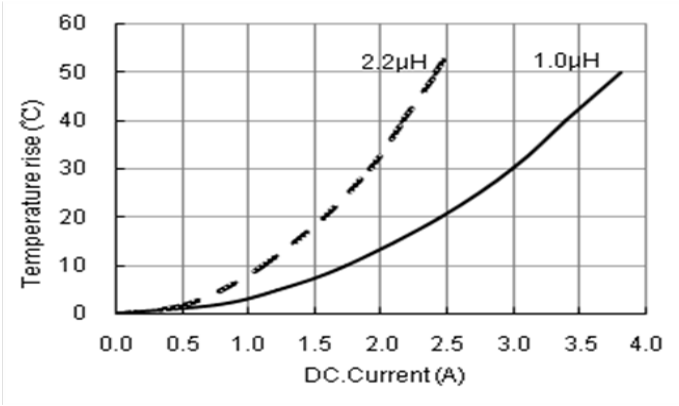


Inductance vs. DC Current Characteristics

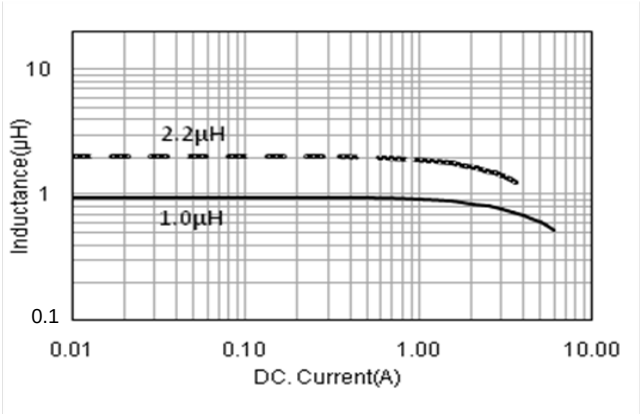


WPN252012H Series

Temperature vs. DC Current Characteristics

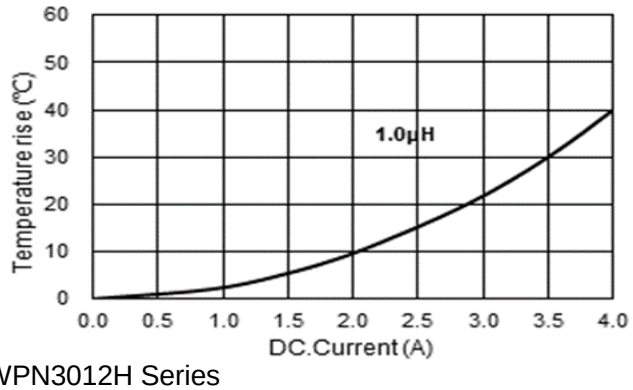


Inductance vs. DC Current Characteristics

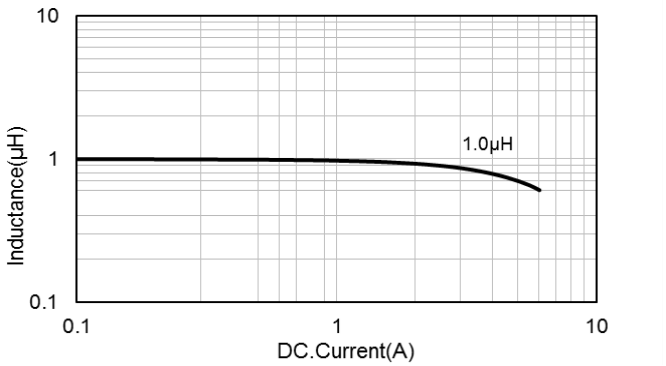


WPN252012E Series

Temperature vs. DC Current Characteristics

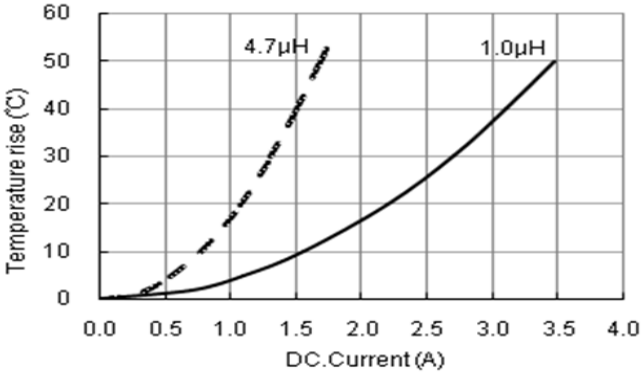


Inductance vs. DC Current Characteristics

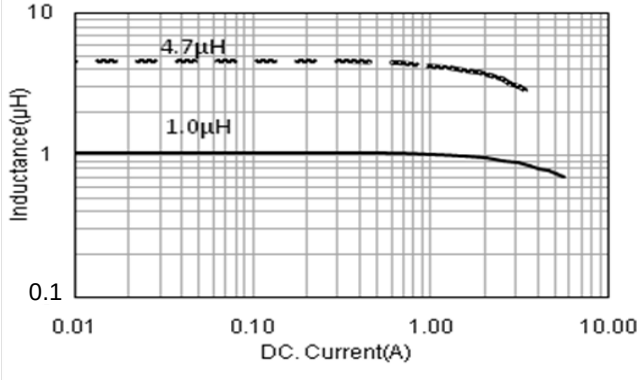


WPN3012H Series

Temperature vs. DC Current Characteristics



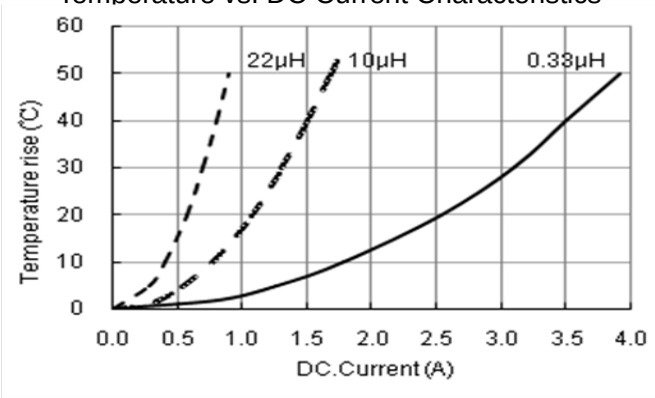
Inductance vs. DC Current Characteristics



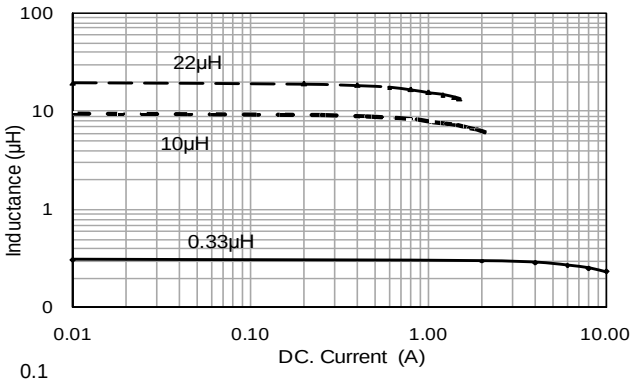
TYPICAL ELECTRICAL CHARACTERISTICS

WPN4012H Series

Temperature vs. DC Current Characteristics

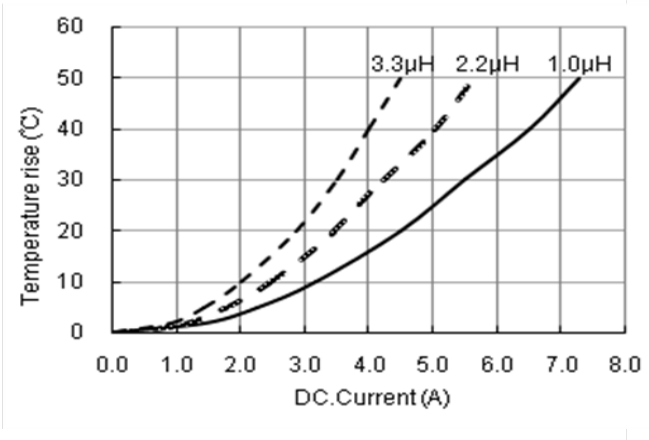


Inductance vs. DC Current Characteristics



WPN4020H Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

