Wire Wound SMD Power Inductors – WPL Series

Operating Temp. : -40℃~+125℃ (Including self-heating)

FEATURES

- Fe base metal material core provides large saturation current
- 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

APPLICATIONS

- Blue -ray disc recorders, set top box
- Notebooks, desktop computers, servers
- Portable gaming devices, personal navigation systems, personal multimedia devices

PRODUCT IDENTIFICATION

WPL	6530	H	2R2	M	T
①	②	③	④	⑤	⑥

①	Type
WPL	Wire Wound SMD Power Inductor

②	External Dimensions (L×W×H) [mm]
6530	7.1×6.5×3.0
8540	8.5×8.2×4.0

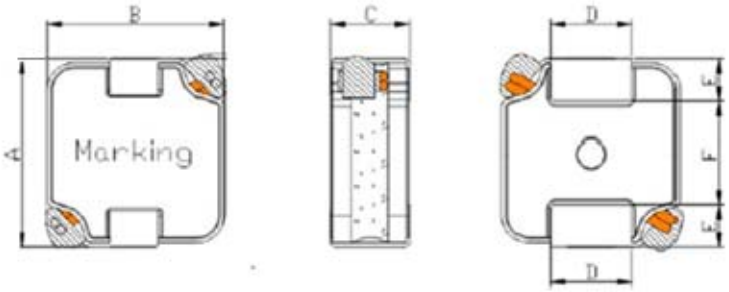
③	Material Code
H	H Type Material

④	Nominal Inductance
Example	Nominal Value
2R2	2.2μH

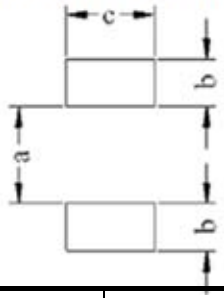
⑤	Inductance Tolerance
M	±20%

⑥	Packing
T	Tape & Reel

SHAPE AND DIMENSIONS



Recommended Land Pattern



Unit: mm

Series	A	B	C	D	E.	F	a Typ.	a Typ.	c Typ.
WPL6530	7.1±0.3	6.5±0.3	3.0±0.2	3.2±0.3	1.55±0.3	3.8±0.3	3.7	1.85	3.4
WPL8540	8.5±0.3	8.2±0.3	4.0 Max	3.9±0.3	1.9±0.3	3.8±0.3	3.8	2.4	4.1

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SPECIFICATIONS

WPL6530H Series

Part Number	Inductance	DC Resistance		Saturation Current		Heat Rating Current	
	@100KHz,1V	Max.	Typ.	Max.	Typ.	Max.	Typ.
Units	μH	mΩ		A		A	
Symbol	L	DCR		Isat		Irms	
WPL6530HR22MT	0.22±20%	4.0	3.3	18.0	25.0	14.0	20.0
WPL6530HR33MT	0.33±20%	5.1	4.3	17.0	23.0	12.4	17.5
WPL6530HR47MT	0.47±20%	6.6	5.5	16.5	22.5	11.0	15.5
WPL6530HR68MT	0.68±20%	8.7	7.3	12.8	18.0	9.5	13.45
WPL6530HR75MT	0.75±20%	8.7	7.3	11.5	15.8	9.5	13.45
WPL6530H1R0MT	1.0±20%	8.7	7.3	9.5	13.0	9.5	13.45
WPL6530H1R5MT	1.5±20%	13.8	11.5	8.0	11.5	6.0	8.50
WPL6530H2R2MT	2.2±20%	18.0	15.0	6.5	8.6	5.65	8.0
WPL6530H3R3MT	3.3±20%	30.5	25.5	4.6	6.6	4.6	7.0
WPL6530H4R7MT	4.7±20%	43.5	36.5	3.8	5.3	3.8	5.4
WPL6530H6R8MT	6.8±20%	64.0	53.5	3.2	4.5	3.2	4.5
WPL6530H8R2MT	8.2±20%	69.0	58.0	3.2	4.5	3.1	4.4
WPL6530H100MT	10±20%	77.4	64.5	3.0	4.45	3.0	4.2
WPL6530H150MT	15±20%	127.0	106.0	3.0	4.25	2.5	3.5
WPL6530H220MT	22±20%	177.0	148.0	1.7	2.4	2.0	2.8

WPL8540H Series

Part Number	Inductance	DC Resistance		Saturation Current		Heat Rating Current	
	@100KHz,1V	Max.	Typ.	Max.	Typ.	Max.	Typ.
Units	μH	mΩ		A		A	
Symbol	L	DCR		Isat		Irms	
WPL8540H1R0MT	1.0±20%	6.5	5.4	16.0	20.0	7.2	8.4
WPL8540H1R5MT	1.5±20%	7.7	6.4	13.0	17.0	6.6	7.6
WPL8540H2R2MT	2.2±20%	12.0	10.0	10.5	14.0	5.4	6.1
WPL8540H3R3MT	3.3±20%	19.9	16.6	11.0	15.0	4.2	4.9
WPL8540H4R7MT	4.7±20%	27.6	23.0	9.5	12.5	3.6	4.2
WPL8540H5R6MT	5.6±20%	30.6	25.5	8.0	11.0	3.4	3.9
WPL8540H6R8MT	6.8±20%	37.4	31.2	6.7	8.0	3.3	3.8
WPL8540H8R2MT	8.2±20%	46.8	39.0	6.7	8.5	3.2	3.7
WPL8540H100MT	10±20%	53.9	44.9	6.4	8.0	3.0	3.5
WPL8540H150MT	15±20%	74.4	62.0	5.0	6.5	2.6	3.0
WPL8540H220MT	22±20%	108.6	90.5	3.3	4.2	2.2	2.5
WPL8540H330MT	33±20%	178.8	149.0	3.3	4.2	1.7	2.0

※1 : All test data is referenced to 20°C ambient;
※2 : Rated current: Isat or Irms, whichever is smaller;
※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.

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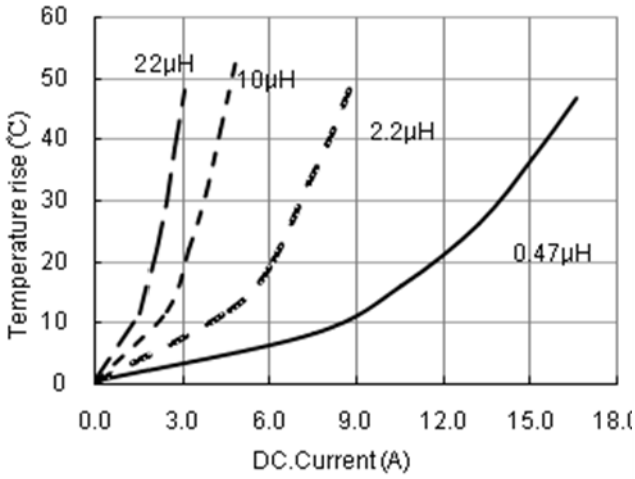
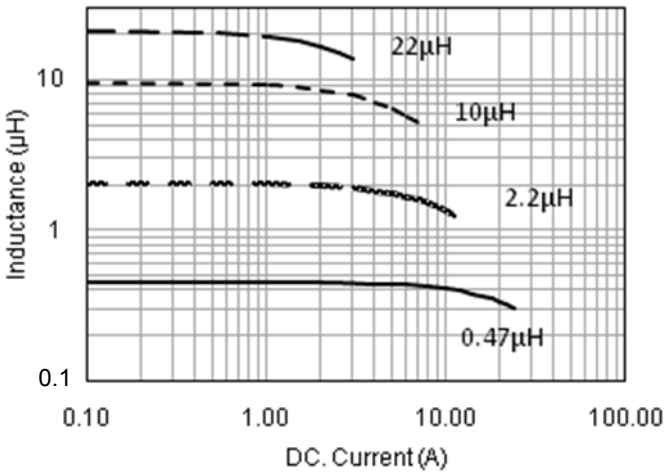
TYPICAL ELECTRICAL CHARACTERISTICS

WPL6530H Series

Temperature vs. DC Current Characteristics

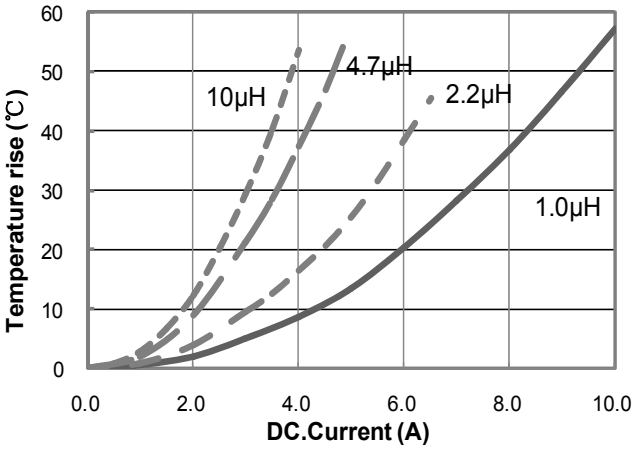


Inductance vs. DC Current Characteristics

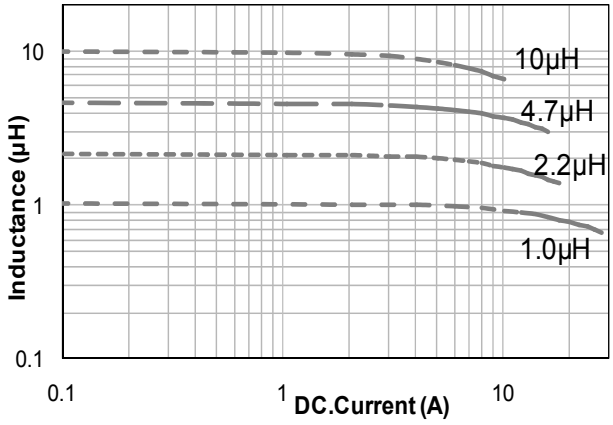


WPL8540H Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics



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