

Wire Wound SMD Power Inductors – WPL Series

Operating Temp. : -40°C~+125°C (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
- Automatic production ensures high quality and consistency

APPLICATIONS

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

PRODUCT IDENTIFICATION

WPL
①

① Type	
WPL	Wire Wound SMD Power Inductor

6530
②

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

H
③

③ Material Code	
H	H Type Material

2R2
④

④ Nominal Inductance	
Example	Nominal Value
2R2	2.2μH

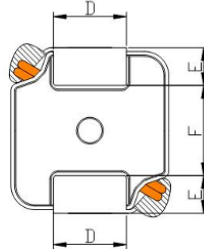
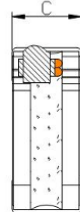
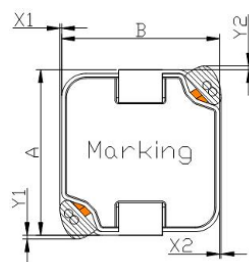
M
⑤

⑤ Inductance Tolerance	
M	±20%

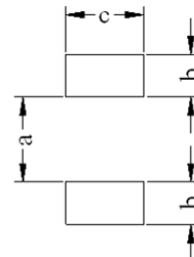
T
⑥

⑥ Packing	
T	Tape & Reel

SHAPE AND DIMENSIONS



Recommended Land Pattern



Unit: mm

Series	A	B	C	X1	X2	Y1	Y2	D	E	F	a	b	c
WPL6530	7.1±0.3	6.5±0.3	3.0±0.2	0.5 Max.				3.2±0.3	1.55±0.3	3.8±0.3	3.7	1.85	3.4

SPECIFICATIONS

WPL6530H Series

Part Number	Inductance	DC Resistance		Saturation Current		Heat Rating Current	
	@100KHz,1V	Max.	Typ.	Max.	Typ.	Max.	Typ.
Units	μH	$\text{m}\Omega$		A		A	
Symbol	L	DCR		Isat		Irms	
WPL6530HR22MT	0.22±20%	4.00	3.30	18.00	25.00	14.00	20.00
WPL6530HR33MT	0.33±20%	5.10	4.30	17.00	23.00	12.40	17.50
WPL6530HR47MT	0.47±20%	6.60	5.50	16.50	22.50	11.00	15.50
WPL6530HR68MT	0.68±20%	8.70	7.30	12.80	18.00	9.50	13.45
WPL6530HR75MT	0.75±20%	8.70	7.30	11.50	15.80	9.50	13.45
WPL6530H1R0MT	1.0±20%	8.70	7.30	9.50	13.00	9.50	13.45
WPL6530H1R5MT	1.5±20%	13.80	11.50	8.00	11.50	6.00	8.50
WPL6530H2R2MT	2.2±20%	18.00	15.00	6.50	8.60	5.65	8.00
WPL6530H3R3MT	3.3±20%	30.50	25.50	4.60	6.60	4.60	7.00
WPL6530H4R7MT	4.7±20%	43.50	36.50	3.80	5.30	3.80	5.40
WPL6530H6R8MT	6.8±20%	64.00	53.50	3.20	4.50	3.20	4.50
WPL6530H8R2MT	8.2±20%	69.00	58.00	3.20	4.50	3.10	4.40
WPL6530H100MT	10±20%	77.40	64.50	3.00	4.45	3.00	4.20
WPL6530H150MT	15±20%	127.00	106.00	3.00	4.25	2.50	3.50
WPL6530H220MT	22±20%	177.00	148.00	1.70	2.40	2.00	2.80

※1 : All test data is referenced to 20°C ambient;

※2 : Rated current: Isat or Irms, whichever is smaller;

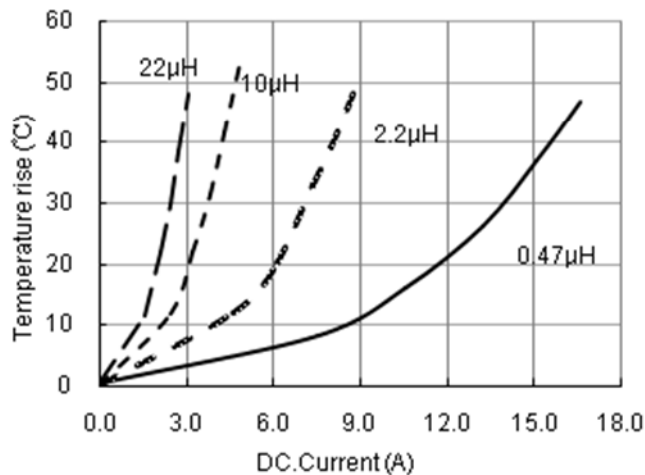
※Isat: DC current at which the inductance drops approximate 30% from its value without current;

※Irms: DC current that causes the temperature rise ($\Delta T = 40^\circ\text{C}$) from 20°C ambient.

TYPICAL ELECTRICAL CHARACTERISTICS

WPL6530H Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

