SMD POWER COIL-*JRPI 1205P 1206P 1265P*

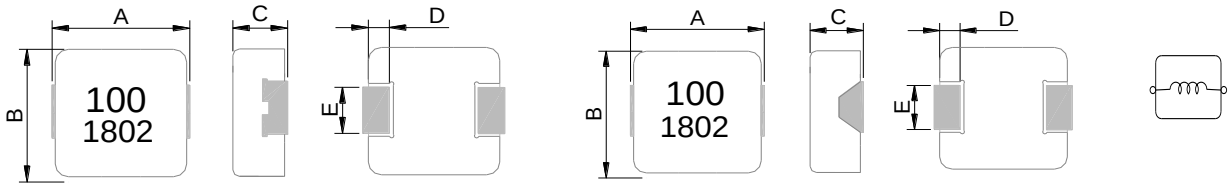
■ FEATURES

1. Shielded construction.
2. Capable of corresponding high frequency
3. Low loss realized with low DCR.
4. High performance (Isat) realized by metal dust core.
5. Ultra low buzz noise, due to composite construction.
6. 100% Lead(Pb)-Free and RoHS compliant.
7. Operating temperature -40~+125℃
   (Including self - temperature rise)

■ APPLICATIONS

1. DC/DC converters in distributed power systems.
2. DC/DC converter for Field Programmable Gate Array(FPGA).
3. Battery powered devices.
4. Thin type on-board power supply module for exchanger.
5. VRM for server.
6. High current, low profile POL converters.
7. PDA/notebook/desktop/server and battery powered devices.

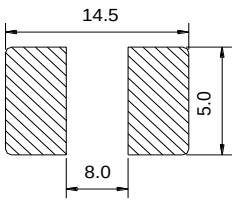
■ DIMENSIONS (mm)



leadframe　　non-leadframe

印字:黑色100及D/C 1802 (18年,02週期)(依實際生產日期而定)

Recommend PC Board Pattern



Note:
1. PCB layout is referred to standard IPC-7351B
2. The above PCB layout reference only.
3. Recommend solder paste thickness at 0.15mm and above.

Part No.	Size (mm)				
	A	B	C	D	E
JRPI 1205P	13.5 ± 0.5	12.6 ± 0.2	4.7 ± 0.3	2.3 ± 0.3	See spec table
JRPI 1206P	13.5 ± 0.5	12.6 ± 0.2	5.7 ± 0.3	2.3 ± 0.3	See spec table
JRPI 1265P	13.5 ± 0.5	12.6 ± 0.2	6.2 ± 0.3	2.3 ± 0.3	See spec table

SERIES LIST

No.	Part No.	L (μH)	RDC (mΩ)		Isat (A)		Irms (A)		E (mm)	Type
			Typ.	Max.	Typ	Max	Typ	Max	±0.3	
1	JRPI 1205P-R47M	0.47±20%	0.77	0.90	65.0	58.0	38.0	34.0	4.0	non-leadframe
2	JRPI 1205P-R68M	0.68±20%	1.30	1.55	50.0	42.0	34.0	31.0	4.0	non-leadframe
3	JRPI 1205P-1R0M	1.0±20%	1.60	1.90	40.0	34.0	30.0	27.0	4.0	non-leadframe
4	JRPI 1205P-1R5M	1.5±20%	3.20	3.80	31.0	28.0	25.0	22.0	4.7	leadframe
5	JRPI 1205P-2R2M	2.2±20%	4.10	4.80	26.0	23.0	17.0	15.5	4.7	leadframe
6	JRPI 1205P-3R3M	3.3±20%	6.00	7.00	23.0	20.5	15.5	14.0	4.7	leadframe
7	JRPI 1205P-4R7M	4.7±20%	8.80	10.2	18.5	16.0	14.0	12.5	4.7	leadframe
8	JRPI 1205P-6R8M	6.8±20%	13.0	16.0	16.5	15.0	12.0	11.0	4.7	leadframe
9	JRPI 1205P-100M	10±20%	19.2	22.0	13.0	10.5	10.0	9.0	4.7	leadframe
10	JRPI 1205P-150M	15±20%	30.0	36.0	11.0	9.2	9.4	8.2	4.7	leadframe
11	JRPI 1205P-220M	22±20%	42.0	52.0	8.5	7.5	8.0	7.0	4.7	leadframe
12	JRPI 1205P-330M	33±20%	66.0	80.0	7.3	6.5	6.0	5.2	4.7	leadframe
1	JRPI 1206P-R36M	0.36±20%	0.65	0.8	70.0	60.0	60.0	50.0	4.7	non-leadframe
2	JRPI 1206P-1R5M	1.5±20%	2.40	3.0	32.0	27.0	28.0	24.0	4.0	non-leadframe
3	JRPI 1206P-2R2M	2.2±20%	3.70	4.3	28.0	24.0	25.0	21.0	4.7	leadframe
4	JRPI 1206P-3R3M	3.3±20%	5.30	6.5	28.0	24.0	21.0	18.0	4.7	leadframe
5	JRPI 1206P-4R7M	4.7±20%	7.00	8.4	23.0	19.5	19.0	16.0	4.7	leadframe
6	JRPI 1206P-8R2M	8.2±20%	13.5	16.0	17.0	15.5	13.5	12.0	4.7	leadframe
7	JRPI 1206P-100M	10±20%	15.5	18.6	16.0	14.5	12.0	10.5	4.7	leadframe
8	JRPI 1206P-150M	15±20%	24.0	29.0	10.0	9.0	10.0	8.5	4.7	leadframe
9	JRPI 1206P-220M	22±20%	31.2	37.5	9.0	8.0	8.0	7.0	4.7	leadframe
10	JRPI 1206P-330M	33±20%	56.0	68.0	7.8	6.7	6.5	5.5	4.7	leadframe
11	JRPI 1206P-470M	47±20%	76.0	88.0	6.7	5.5	5.2	4.5	4.7	leadframe
12	JRPI 1206P-680M	68±20%	103	124	5.8	5.0	4.5	3.7	4.7	leadframe
13	JRPI 1206P-101M	100±20%	162	195	5.0	4.0	3.2	2.8	4.7	leadframe
14	JRPI 1206P-151M	150±20%	270	325	4.1	3.2	2.6	2.2	4.7	leadframe
1	JRPI 1265P-R10N	0.10±30%	0.2	0.25	120.0	115.0	65.0	60.0	4.7	non-leadframe
2	JRPI 1265P-R22M	0.22±20%	0.4	0.46	112.0	105.0	53.0	42.0	4.7	non-leadframe
3	JRPI 1265P-R33M	0.33±20%	0.6	0.70	75.0	65.0	46.0	36.0	4.7	non-leadframe
4	JRPI 1265P-R68M	0.68±20%	1.25	1.50	55.0	46.0	36.5	33.0	4.0	non-leadframe
5	JRPI 1265P-1R0M	1.0±20%	1.5	1.80	45.0	36.0	33.0	29.0	4.0	non-leadframe
6	JRPI 1265P-1R5M	1.5±20%	2.2	2.53	35.0	30.0	29.0	25.0	4.0	non-leadframe
7	JRPI 1265P-1R8M	1.8±20%	3.2	3.6	31.0	27.0	27.0	23.0	4.7	leadframe
8	JRPI 1265P-2R2M	2.2±20%	3.7	4.2	28.5	24.0	25.0	21.0	4.7	leadframe
9	JRPI 1265P-3R3M	3.3±20%	5.3	6.2	27.0	22.5	22.0	19.0	4.7	leadframe
10	JRPI 1265P-4R7M	4.7±20%	6.8	8.0	25.0	21.0	20.0	17.0	4.7	leadframe
11	JRPI 1265P-5R6M	5.6±20%	8.3	9.8	23.0	19.5	18.0	15.0	4.7	leadframe
12	JRPI 1265P-6R8M	6.8±20%	9.8	11.3	21.0	18.0	16.5	14.0	4.7	leadframe
13	JRPI 1265P-8R2M	8.2±20%	12.0	13.8	19.0	17.0	15.0	12.5	4.7	leadframe
14	JRPI 1265P-100M	10±20%	13.0	15.8	17.0	15.0	13.0	11.0	4.7	leadframe
15	JRPI 1265P-150M	15±20%	22	26	13.5	12.0	11.0	9.5	4.7	leadframe
16	JRPI 1265P-220M	22±20%	31	35	10.0	9.0	10.0	8.0	4.7	leadframe
17	JRPI 1265P-330M	33±20%	46	55	9.0	8.0	9.0	6.5	4.7	leadframe
18	JRPI 1265P-470M	47±20%	58	67	706.0	6.8	8.0	5.7	4.7	leadframe
19	JRPI 1265P-680M	68±20%	82	100	6.0	5.0	5.8	4.8	4.7	leadframe
20	JRPI 1265P-820M	82±20%	110	132	5.0	4.2	5.0	4.0	4.7	leadframe
21	JRPI 1265P-101M	100±20%	140	161	5.0	4.0	5.0	3.8	4.7	leadframe

Note:

1. Test Frequency: 100KHz /1V
2. All test data referenced to 25℃ ambient
3. Saturation Current (Isat) will cause L0 to drop approximately 30%.
4. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40℃
5. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. Irms Testing : Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.
7. Rated DC Current : The less value whith is Irms or Isat.

FEATURES

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   (Including self - temperature rise)

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1. DC/DC converters in distributed power systems.
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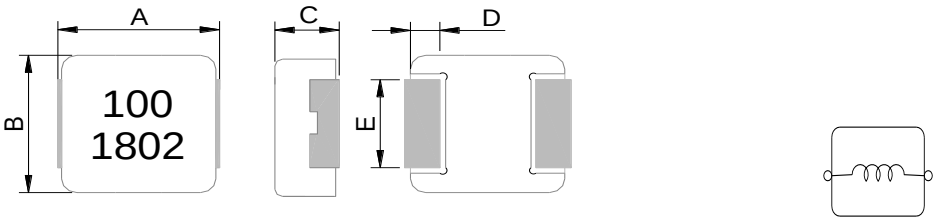
DIMENSIONS (mm)



印字:黑色100及D/C 1802 (18年,02週期)(依實際生產日期而定)

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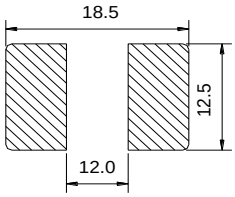

Note:
1. PCB layout is referred to standard IPC-7351B
2. The above PCB layout reference only.
3. Recommend solder paste thickness at 0.17mm and above.

Part No.	Size (mm)				
	A	B	C	D	E
JRPI 1707P	17.8 ± 0.5	16.9 ± 0.3	6.7 ± 0.3	2.3 ± 0.3	11.9 ± 0.3

SERIES LIST

No.	Part No.	L	RDC		Isat		Irms	
			(mΩ)	(mΩ)	(A)	(A)	(A)	(A)
		(μH)	Typ	Max	Typ	Max	Typ	Max
1	JRPI 1707P-R47M	0.47±20%	0.7	0.9	110	100	60	55
2	JRPI 1707P-R56M	0.56±20%	0.81	0.97	80	70	56	50
3	JRPI 1707P-1R0M	1.0±20%	1.06	1.3	50	45	46	42
4	JRPI 1707P-1R5M	1.5±20%	1.5	1.8	46	40	39	35
5	JRPI 1707P-1R8M	1.8±20%	1.7	2.0	40	34	35	32
6	JRPI 1707P-2R2M	2.2±20%	1.8	2.2	35	32	32	30
7	JRPI 1707P-3R3M	3.3±20%	2.7	3.3	32	29	30	28
8	JRPI 1707P-4R7M	4.7±20%	3.7	4.5	29	26	28	26
9	JRPI 1707P-6R8M	6.8±20%	6.0	7.2	25	22	24	22
10	JRPI 1707P-100M	10±20%	9.2	10.6	22	19	21	19
11	JRPI 1707P-150M	15±20%	12.8	15.5	16	14	16	14
12	JRPI 1707P-220M	22±20%	20.5	24.0	13.5	11.5	13.5	11.5
13	JRPI 1707P-330M	33±20%	32.0	37.0	12	10	12	10
14	JRPI 1707P-470M	47±20%	40.0	47.0	9.5	8.0	9.5	8.0
15	JRPI 1707P-680M	68±20%	66.0	76.0	8.5	7.2	8.0	6.5
16	JRPI 1707P-820M	82±20%	69.0	83.0	8.0	6.5	6.5	5.7

Note:

1. Test Frequency: 100KHz /1V
2. All test data referenced to 25℃ ambient
3. Saturation Current (Isat) will cause L0 to drop approximately 30%.
4. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40℃
5. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. Irms Testing : Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions
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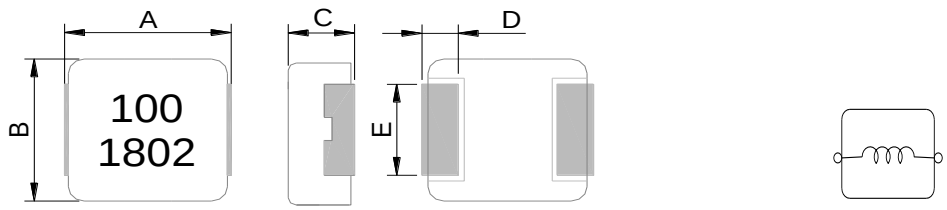

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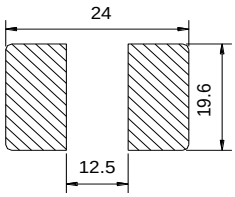
Recommend PC Board Pattern



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3. Recommend solder paste thickness
   at 0.20mm and above.

Part No.	Size (mm)				
	A	B	C	D	E
JRPI 2313P	23.5 ± 0.5	22.0 ± 0.3	12.6 ± 0.4	5.4 ± 0.4	19.0 ± 0.3

■ SERIES LIST

No.	Part No.	L (μH)	RDC (mΩ)		Isat (A)		Irms (A)	
			Typ.	Max.	Typ	Max	Typ	Max
1	JRPI 2313P-1R5M	1.5±20%	1.00	1.15	52	48	62	57
2	JRPI 2313P-2R2M	2.2±20%	1.05	1.25	48	43	58	52
3	JRPI 2313P-3R3M	3.3±20%	1.50	1.75	41	37	49	47
4	JRPI 2313P-4R7M	4.7±20%	1.90	2.20	38	34	47	44
5	JRPI 2313P-6R8M	6.8±20%	2.70	3.10	36	32	40	36
6	JRPI 2313P-100M	10±20%	3.80	4.15	28	20	33	30
7	JRPI 2313P-220M	22±20%	9.20	11.0	15	14	22	18
8	JRPI 2313P-330M	33±20%	13.5	15.4	12	10.5	19	16
9	JRPI 2313P-470M	47±20%	17.3	20.8	12	10.0	17	14
10	JRPI 2313P-680M	68±20%	26.2	29.5	12	9.0	14	12
11	JRPI 2313P-820M	82±20%	31.0	34.2	9.0	7.7	12	10
12	JRPI 2313P-101M	100±20%	36.0	40.0	9.0	7.5	11	9.5

Note:

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