SMD POWER COIL-*JRPI 0612M*

PRODUCT IDENTIFICATION

JRPI 0612 M – 4R7 M

Type / Size / Control / Inductance / Tol.

■ FEATURES

1. Magnetic metal powder inductor.
2. Compact design.
3. High current，low DCR，high efficiency.
4. Very low acoustic noise and very low leakage flux noise.
5. High reliability.
6. 100% Lead(Pb)-Free and RoHS compliant.
7. Operating temperature -40~+125℃

■ Marking and Date code:

Marking ex: 4.7(μH) → 4R7

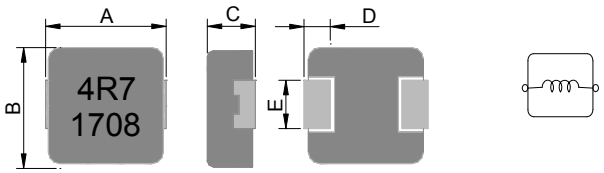
Date code

17 08 →year and weekly

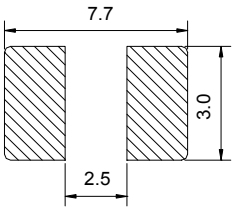
■ APPLICATIONS

Note PC power system，incl. IMVP-6
DC/DC converter .

■ DIMENSIONS (mm)



Recommend PC Board Pattern



Note:
1. The above PCB layout reference only.
2. Recommend solder paste thickness at 0.15mm and above.

印字:黑色4R7及D/C 1708 (17年,08週期)(依實際生產日期而定)

Part No.	Size (mm)				
	A	B	C	D	E
JRPI 0612M	7.0 ± 0.3	6.6 ± 0.3	1.0 ± 0.2	1.8 ± 0.3	2.5 ± 0.3

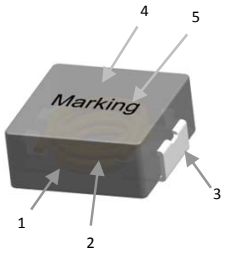
■ SERIES LIST

No.	Part No.	L (μH)	TOL. (%)	RDC (mΩ) Typ.	RDC (mΩ) Max.	I sat (A) Typ.	I rms (A) Typ.
1	JRPI 0612M-R10N	0.10	±30	3.3	4.0	30	16
2	JRPI 0612M-R15N	0.15	±30	4.9	5.7	24	14
3	JRPI 0612M-R22N	0.22	±30	6.5	7.5	19	11
4	JRPI 0612M-R33M	0.33	±20	9.0	10	16	9.5
5	JRPI 0612M-R47M	0.47	±20	13	17	12	8.5
6	JRPI 0612M-R68M	0.68	±20	17	19	9.0	7.0
7	JRPI 0612M-1R0M	1.00	±20	27	30	7.0	6.0
8	JRPI 0612M-1R2M	1.20	±20	31	36	6.8	5.0
9	JRPI 0612M-1R5M	1.50	±20	35	40	6.5	4.5
10	JRPI 0612M-2R2M	2.20	±20	53	61	5.0	4.0
11	JRPI 0612M-3R3M	3.30	±20	90	103	4.0	3.2
12	JRPI 0612M-4R7M	4.70	±20	130	150	3.8	2.5
13	JRPI 0612M-6R8M	6.80	±20	172	198	3.0	2.1
14	JRPI 0612M-100M	10.0	±20	280	290	2.5	1.8
15	JRPI 0612M-180M	18.0	±20	490	540	2.0	1.35
16	JRPI 0612M-220M	22.0	±20	540	600	1.7	1.2

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. Special inquiries besides the above common used types can be met on your requirement.

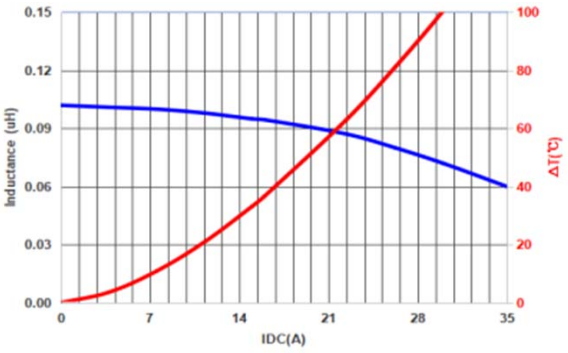
Materials



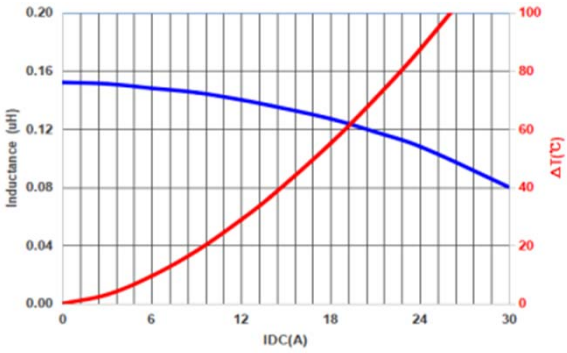
NO	Items	Materials
1	Core	Carbonyl Powder.
2	Wire	Polyester Wire or equivalent
3	Clip	100% Pb free solder(Ni+Sn---Plating)
4	paint	Epoxy resin
5	Ink	Halogen-free ketone

TYPICAL PERFORMANCE CURVES

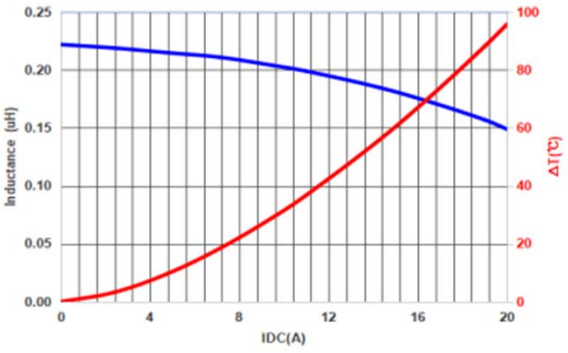
JRPI 0612M-R10



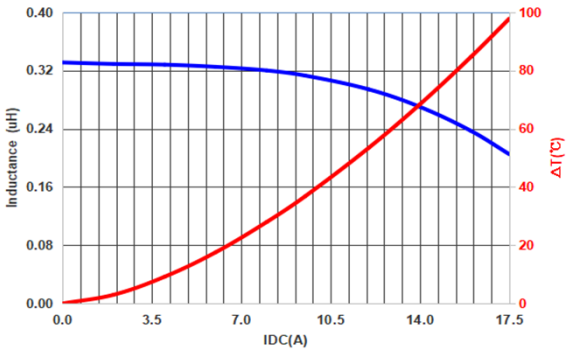
JRPI 0612M-R15



JRPI 0612M-R22



JRPI 0612M-R33



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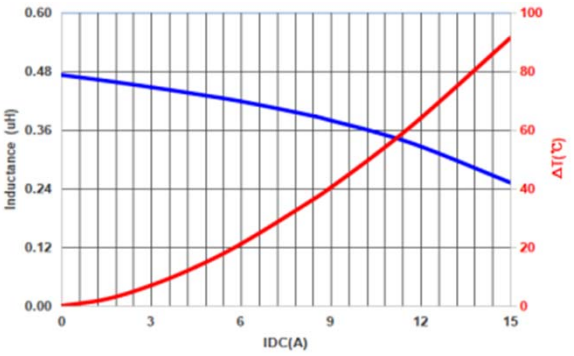

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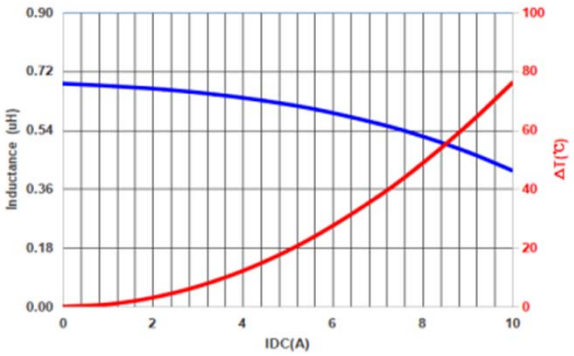
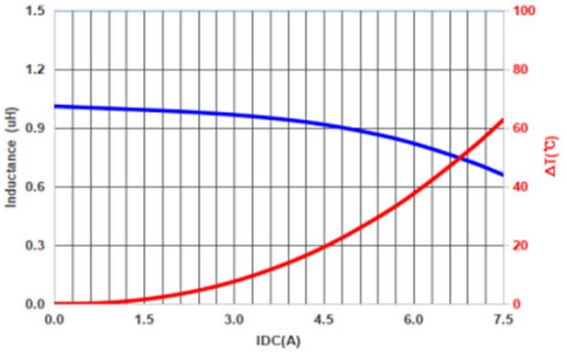
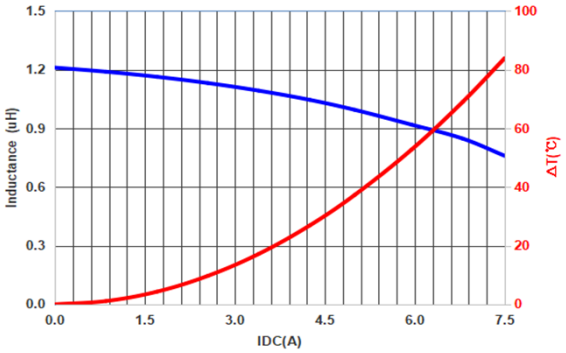


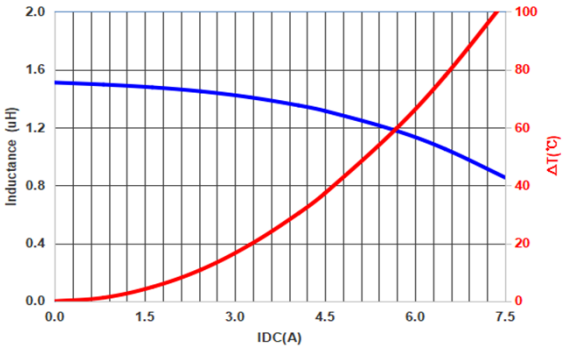
JRPI 0612M-1R0



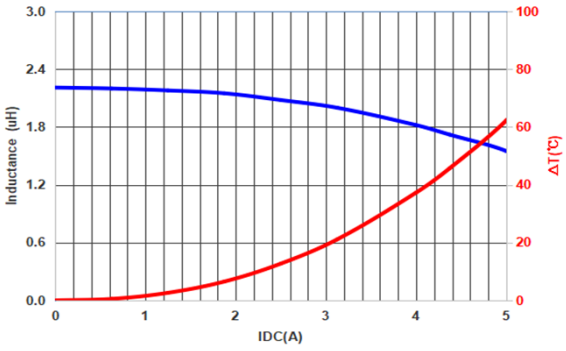
JRPI 0612M-1R2



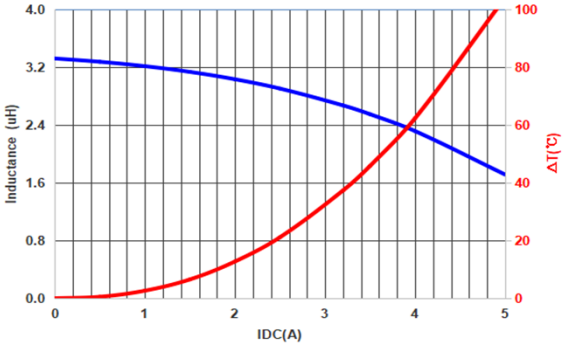
JRPI 0612M-1R5



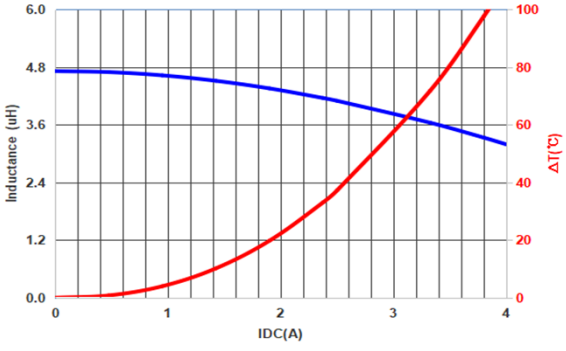
JRPI 0612M-2R2



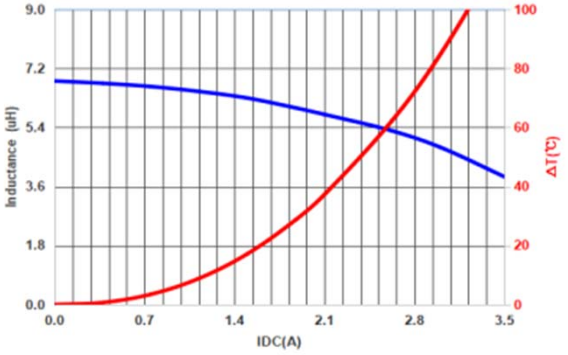
JRPI 0612M-3R3



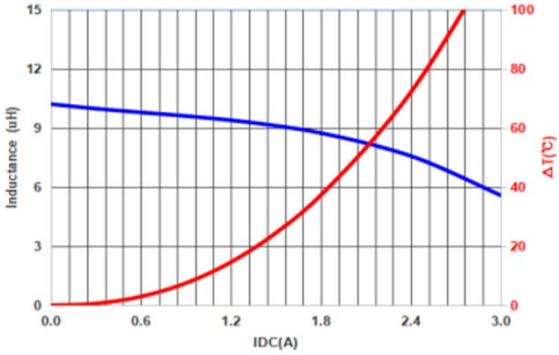
JRPI 0612M-4R7



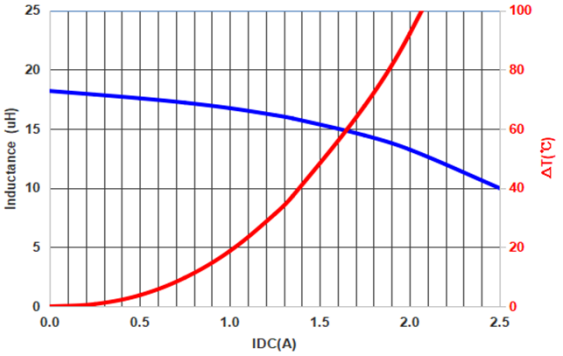
JRPI 0612M-6R8



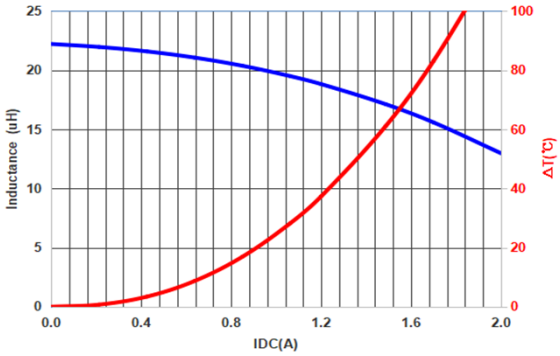
JRPI 0612M-100



JRPI 0612M-180

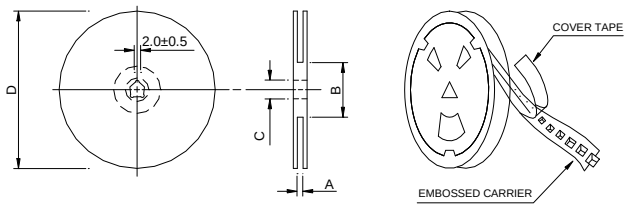


JRPI 0612M-220



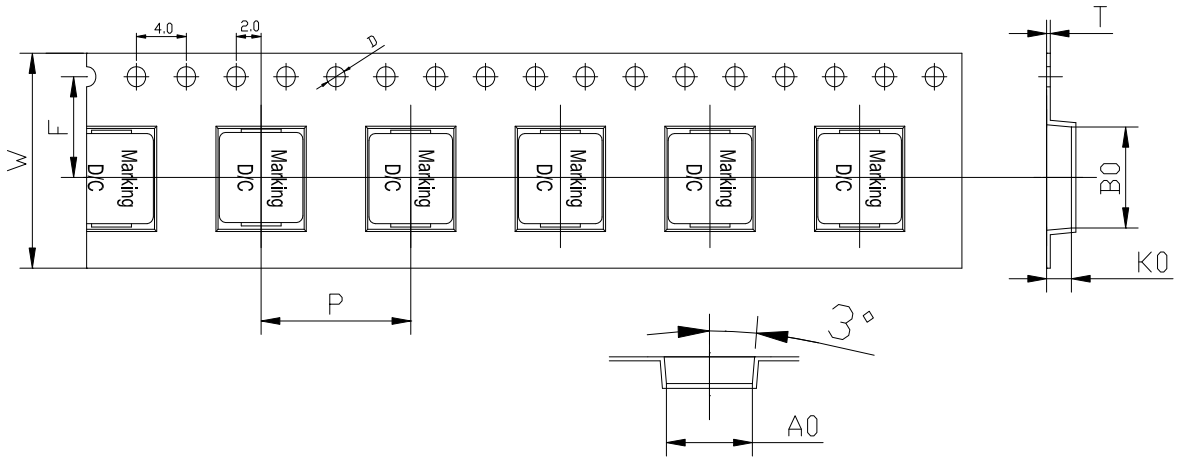
Packaging Information

• Reel Dimension



Type	A(mm)	B(mm)	C(mm)	D(mm)
13"x16mm	16.4+2/-0	100±2	13+0.5/-0.2	330

• Tape Dimension

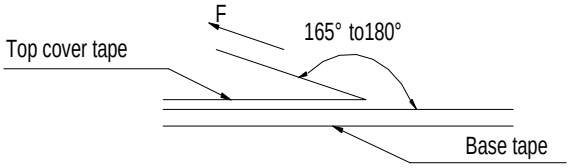


Ao(mm)	Bo(mm)	Ko(mm)	P(mm)	W(mm)	F(mm)	t(mm)	D(mm)
7.0±0.1	7.7±0.1	1.5±0.1	12.0±0.1	16±0.3	7.5±0.1	0.35±0.05	1.5±0.1

• Packaging Quantity

Size	Reel	Inner box	Carton
JRPI 0612M	3000	6000	24000

• Tearing Off Force



The force for tearing off cover tape is 10 to 130 grams in the arrow direction under the following conditions (referenced ANSI/EIA-481-C-2003 of 4.11 standard)

Room Temp. (℃)	Room Humidity (%)	Room atm (hPa)	Tearing Speed mm/min
5~35	45~85	860~1060	300

■ Application Notice

- Storage Conditions(component level)

  To maintain the solderability of terminal electrodes:

  1. Products meet IPC/JEDEC J-STD-020D standard-MSL, level 1.
  2. Temperature and humidity conditions: Less than 40℃ and 60% RH.
  3. Recommended products should be used within 12 months form the time of delivery.
  4. The packaging material should be kept where no chlorine or sulfur exists in the air.

- Transportation

  1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
  2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
  3. Bulk handling should ensure that abrasion and mechanical shock are minimized.