

PRODUCT IDENTIFICATION

JRPI 0604 P - 6R8 M
 | | | |
Type Size Material Inductance Tol.

FEATURES

1. Low loss realized with low DCR.
2. High performance realized by metal dust core.
3. Ultra low buzz noise, due to composite construction.
4. 100% Lead(Pb)-Free and RoHS compliant.
5. Operating temperature -40 ~ +125°C
(Including self - temperature rise)

APPLICATIONS

Commercial applications

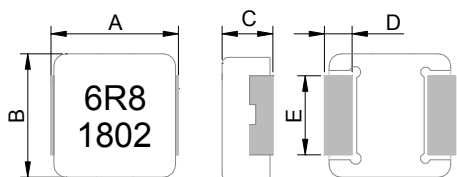
Marking and Date code:

Marking ex: 6.8 (μH) → 6R8

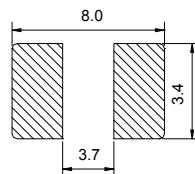
Date code

18 02 → year and weekly

DIMENSIONS (mm)



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 0.12mm and above

印字:黑色6R8及D/C 1802 (18年,02週期)(依實際生產日期而定)

Part No.	Size (mm)				
	A	B	C	D	E
JRPI 0604P	7.10 ± 0.30	6.60 ± 0.20	3.80 ± 0.20	1.60 ± 0.30	2.80 ± 0.30

SERIES LIST

No.	Part No.	L	RDC		Isat		Irms	
		(μH)	Typ.	Max.	(A)	(A)	(A)	(A)
1	JRPI 0604P-R15M	0.15±20%	1.4	1.68	45.0	40.0	35.0	30.0
2	JRPI 0604P-R33M	0.33±20%	2.2	2.5	28.0	25.0	25.0	23.0
3	JRPI 0604P-R45M	0.45±20%	2.8	3.2	21.0	18.0	20.0	18.0
4	JRPI 0604P-R56M	0.56±20%	3.4	3.7	20.0	17.0	19.0	16.0
5	JRPI 0604P-1R0M	1.0±20%	5.6	6.2	15.0	13.5	15.0	13.0
6	JRPI 0604P-6R8M	6.8±20%	31	38	6.8	5.8	7.6	6.6

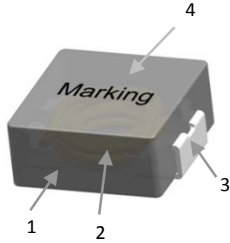
Note:

1. Test Frequency: 100KHz /1V
2. All test data referenced to 25°C 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°C
5. The part temperature (ambient + temp rise) should not exceed 125°C 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.

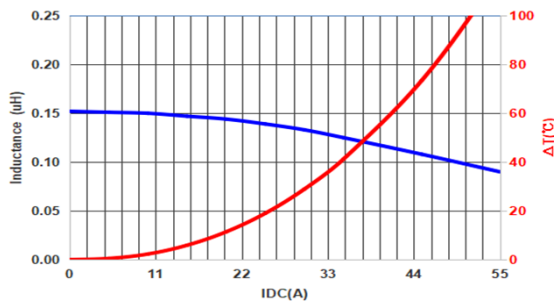
Materials



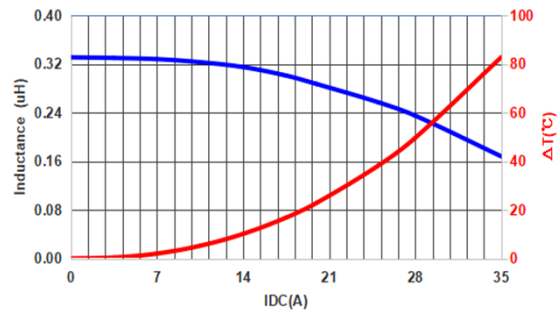
NO	Items	Materials
1	Core	Alloy Powder
2	Wire	Polyester Wire or equivalent
3	Clip	100% Pb free solder(Ni+Sn---Plating)
4	Ink	Halogen-free ketone

TYPICAL PERFORMANCE CURVES

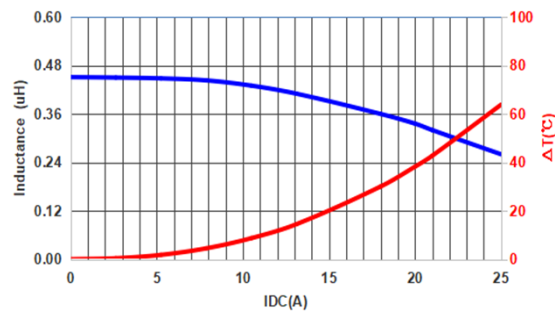
JRPI 0604P-R15



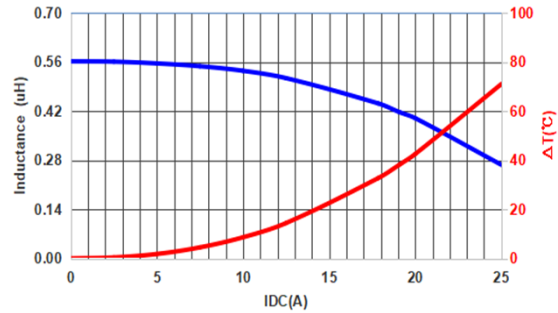
JRPI 0604P-R33



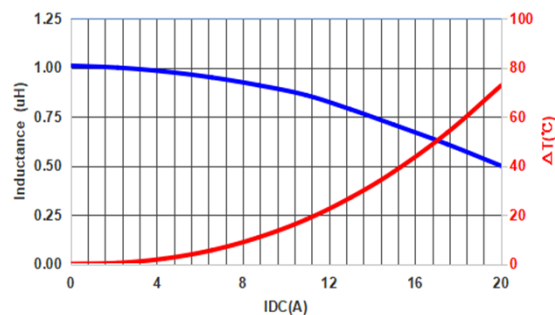
JRPI 0604P-R45



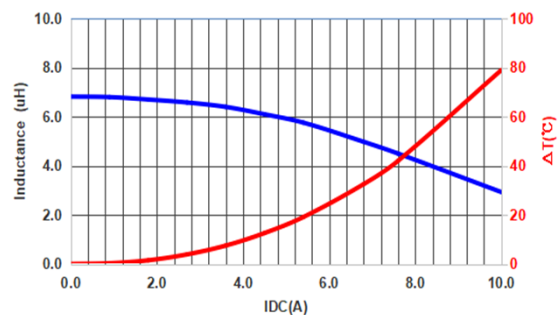
JRPI 0604P-R56



JRPI 0604P-1R0

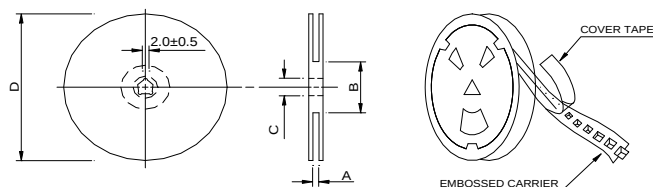


JRPI 0604P-6R8



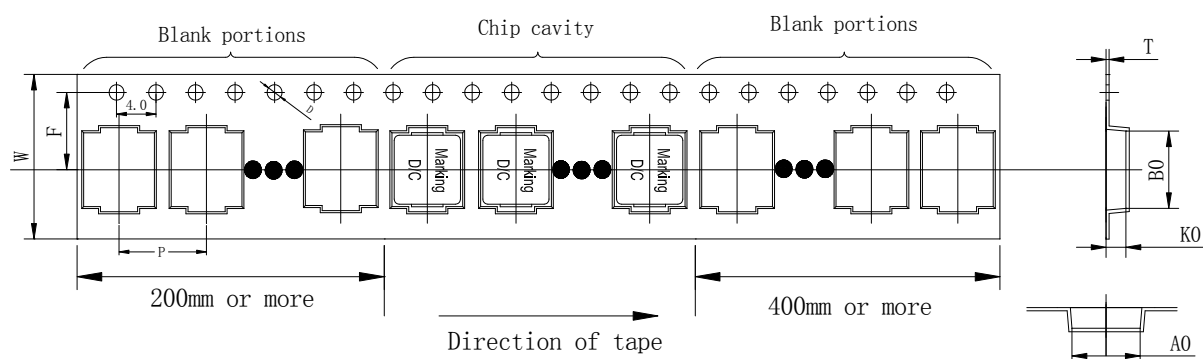
Packaging Information

• Reel Dimension



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

• Tape Dimension

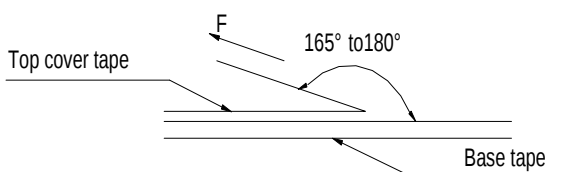


Ao(mm)	Bo(mm)	Ko(mm)	P(mm)	W(mm)	F(mm)	t(mm)	D(mm)
7.0 ± 0.1	7.7 ± 0.1	4.3 ± 0.1	12 ± 0.1	16 ± 0.3	7.5 ± 0.1	0.35 ± 0.05	1.5 ± 0.1

• Packaging Quantity

Size	Reel
JRPI 0604P	1000

• 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-D-2008 of 4.11 standard)

Tearing Speed	Room Temp.	Room Humidity	Room atm
mm	($^{\circ}\text{C}$)	(%)	(hPa)
$300 \pm 10\%$	5~35	45~85	860~1060

■ Application Notice

- Storage Conditions(component level)

To maintain the solderability of terminal electrodes:

1. Products meet IPC/JEDEC J-STD-020E standard-MSL, level 1.
2. Temperature and humidity conditions: Less than 40°C 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.