



PRODUCT IDENTIFICATION

JRPI	1005	V	-	4R7	M
Type	Size	Vehicle		Inductance	Tol.

FEATURES

1. Carbonyl Powder.
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. High reliability -Reliability test complied to AEC-Q200.

APPLICATIONS

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

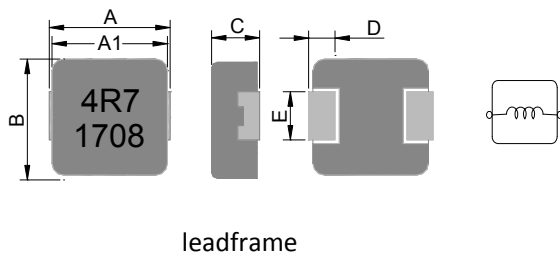
Marking and Date code:

Marking ex:4.7(μ H) $\rightarrow$ 4R7

Date code

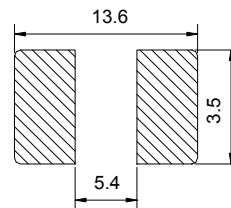
17 08 $\rightarrow$ year and weekly

DIMENSIONS (mm)



leadframe

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	A1	B	C	D	E
JRPI 1005V	11.0 $\pm$ 0.5	10.0 $\pm$ 0.3	10.0 $\pm$ 0.3	4.8 $\pm$ 0.2	2.3 $\pm$ 0.3	3.0 $\pm$ 0.3

SERIES LIST

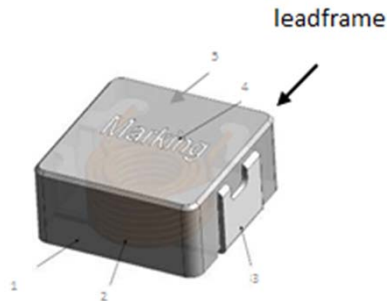
No.	Part No.	L	Test Frequency	RDC (m Ω)		Isat (A)	Irms (A)	Type
		(μ H)	(Hz)	Typ.	Max.	Typ.	Typ.	
1	JRPI 1005V-2R2M	2.20	100K/1V	5.4	6.0	24.0	16.0	leadframe
2	JRPI 1005V-3R3M	3.30	100K/1V	9.0	10.4	22.0	14.0	leadframe
3	JRPI 1005V-4R7M	4.70	100K/1V	10.0	12.5	19.0	13.0	leadframe
4	JRPI 1005V-5R6M	5.60	100K/1V	14.0	16.8	16.0	10.0	leadframe
5	JRPI 1005V-6R8M	6.80	100K/1V	16.5	21.0	15.0	9.5	leadframe
6	JRPI 1005V-8R2M	8.20	100K/1V	18.5	24.0	14.5	9.0	leadframe
7	JRPI 1005V-100M	10.0	100K/1V	25.0	29.0	13.5	8.0	leadframe
8	JRPI 1005V-150M	15.0	100K/1V	37.0	45.0	9.5	5.5	leadframe
9	JRPI 1005V-220M	22.0	100K/1V	50.0	60.0	9.0	5.0	leadframe
10	JRPI 1005V-330M	33.0	100K/1V	80.0	92.0	7.5	4.3	leadframe
11	JRPI 1005V-470M	47.0	100K/1V	125	145	6.5	3.8	leadframe
12	JRPI 1005V-680M	68.0	100K/1V	176	205	4.0	2.5	leadframe
13	JRPI 1005V-101M	100.0	100K/1V	315	380	3.0	2.0	leadframe

Note:

1. All test data referenced to 25 $^{\circ}$ C ambient
2. Saturation Current (Isat) will cause L0 to drop approximately 30%

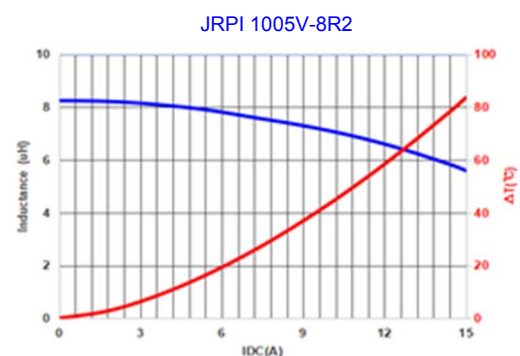
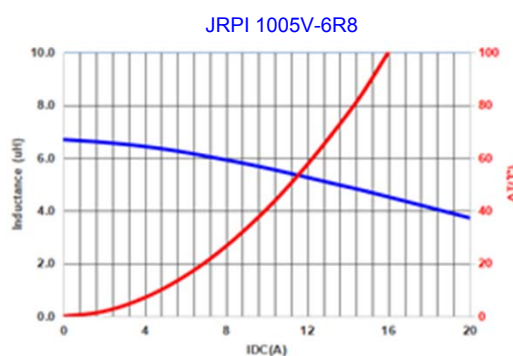
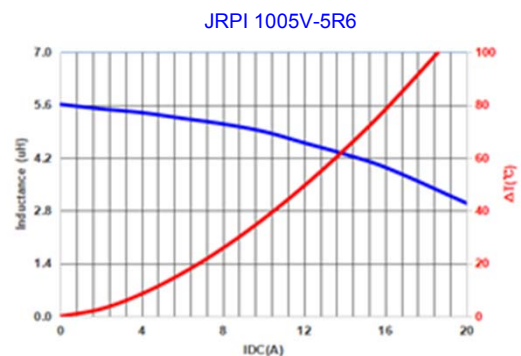
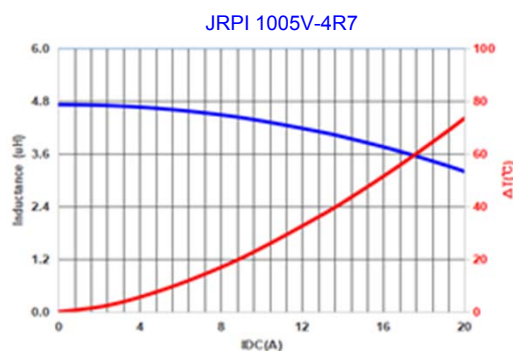
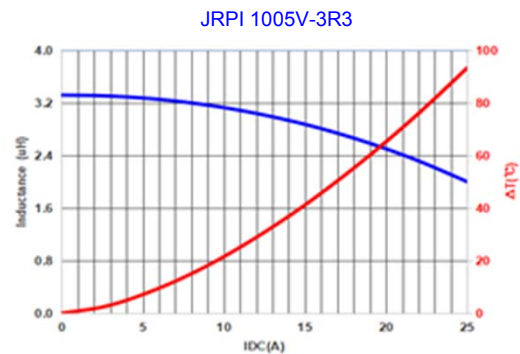
- Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately ΔT of 40°C
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.
Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Special inquiries besides the above common used types can be met on your requirement.
- Remark: Unit weight = 2.95g (for ref.)

Materials

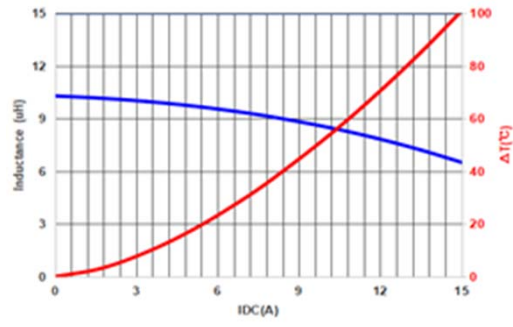


NO	Items	Materials
1	Core	Carbonyl Powder
2	Wire	Polyester Wire or equivalent
3	Clip	100% Pb free solder(Ni+Sn---Plating)
4	Ink	Halogen-free ketone
5	paint	Epoxy resin

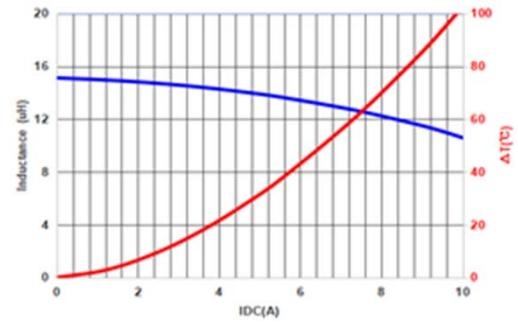
Typical Performance Curves



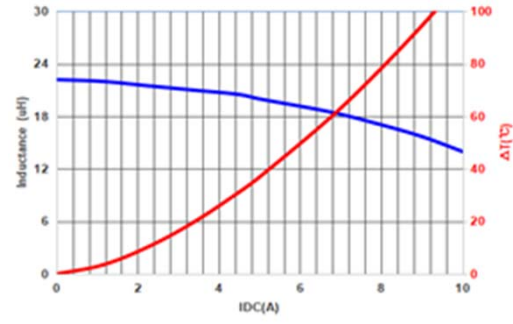
JRPI 1005V-100



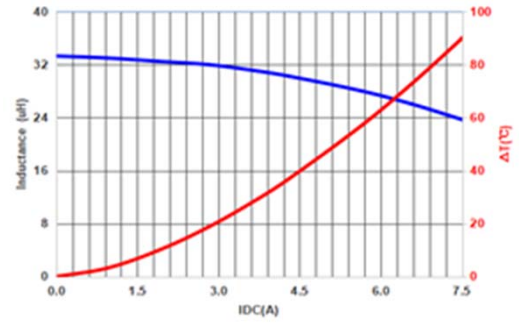
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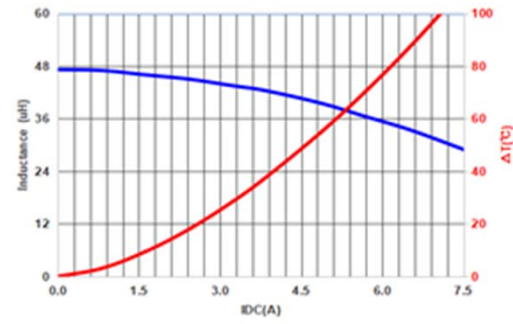
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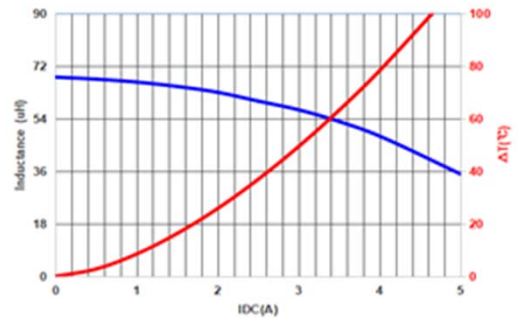
JRPI 1005V-330



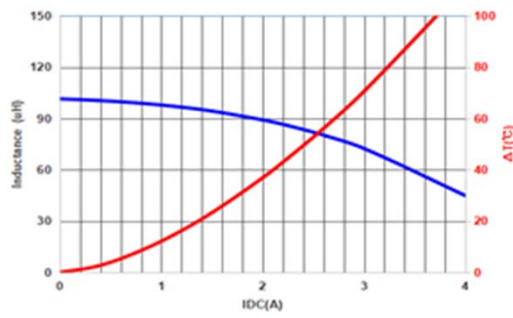
JRPI 1005V-470



JRPI 1005V-680

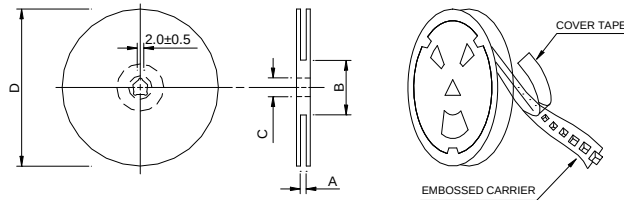


JRPI 1005V-101



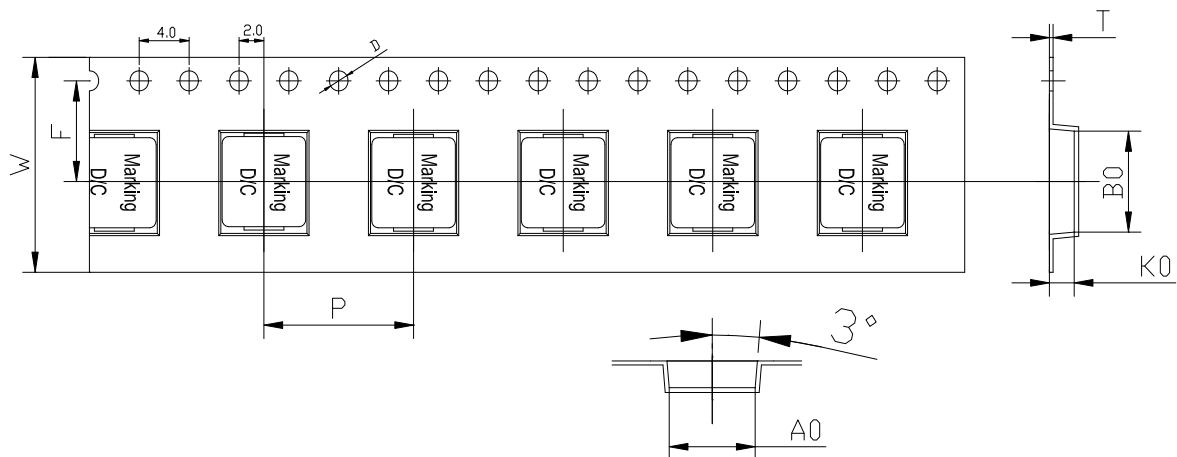
Packaging Information

• Reel Dimension



Type	A(mm)	B(mm)	C(mm)	D(mm)
13"x24mm	24.4+2/-0	100±2	13+0.5/-0.2	330

• Tape Dimension

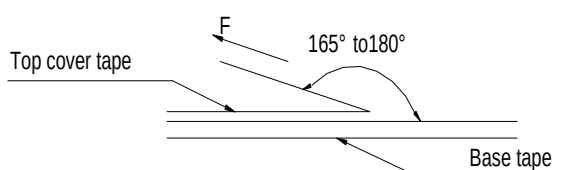


Ao(mm)	Bo(mm)	Ko(mm)	P(mm)	W(mm)	F(mm)	t(mm)	D(mm)
10.4±0.1	11.6±0.1	5.3±0.1	16.0±0.1	24±0.3	11.5±0.1	0.35±0.05	1.5±0.1

• Packaging Quantity

Size	Reel	Inner box	Carton
JRPI 1005V	500	1000	4000

• 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. (°C)	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°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.