



PRODUCT IDENTIFICATION

JRPI	1004	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

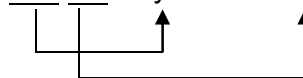
Note PC power system , incl. IMVP-6
DC/DC converter .

Marking and Date code:

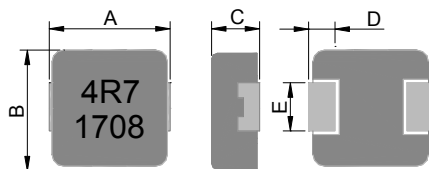
Marking ex:4.7(μH) → 4R7

Date code

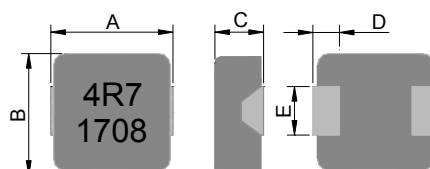
17 08 → year and weekly



DIMENSIONS (mm)



leadframe

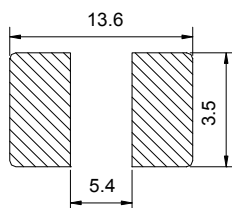


non-leadframe



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

Recommend PC Board Pattern



Note:

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

Part No.	Size (mm)				
	A	B	C	D	E
JRPI 1004V	11.0 ± 0.5	10.0 ± 0.3	3.8 ± 0.2	2.3 ± 0.3	3.0 ± 0.3

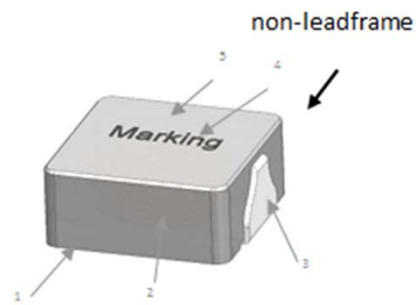
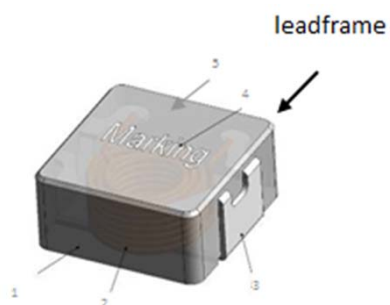
SERIES LIST

No.	Part No.	L (μ H)	Test Frequency (Hz)	RDC (m Ω)		Isat (A) Typ.	Irms (A) Typ.	Type
				Typ.	Max.			
1	JRPI 1004V-R15N	0.15	100K/1V	0.50	0.60	75.0	43.0	non-leadframe
2	JRPI 1004V-R19N	0.19	100K/1V	0.60	0.90	70.0	36.0	non-leadframe
3	JRPI 1004V-R20N	0.20	100K/1V	0.66	0.95	70.0	35.0	non-leadframe
4	JRPI 1004V-R22M	0.22	100K/1V	0.80	1.00	60.0	35.0	non-leadframe
5	JRPI 1004V-R24M	0.24	100K/1V	0.80	1.00	60.0	34.0	non-leadframe
6	JRPI 1004V-R27M	0.27	100K/1V	0.82	1.00	60.0	33.0	non-leadframe
7	JRPI 1004V-R30M	0.30	100K/1V	0.94	1.10	60.0	32.0	non-leadframe
8	JRPI 1004V-R36M	0.36	100K/1V	1.05	1.20	60.0	31.0	non-leadframe
9	JRPI 1004V-R39M	0.39	100K/1V	1.10	1.30	60.0	30.0	non-leadframe
10	JRPI 1004V-R45M	0.45	100K/1V	1.30	1.50	45.0	29.0	non-leadframe
11	JRPI 1004V-R47M	0.47	100K/1V	1.30	1.50	43.0	28.0	non-leadframe
12	JRPI 1004V-R56M	0.56	100K/1V	1.60	1.80	40.0	25.0	non-leadframe
13	JRPI 1004V-R68M	0.68	100K/1V	2.40	2.70	39.0	22.0	non-leadframe
14	JRPI 1004V-R75M	0.75	100K/1V	2.40	2.70	39.0	22.0	non-leadframe
15	JRPI 1004V-R88M	0.88	100K/1V	2.50	2.90	38.0	20.0	non-leadframe
16	JRPI 1004V-R90M	0.90	100K/1V	2.60	3.00	38.0	20.0	non-leadframe
17	JRPI 1004V-1R0M	1.00	100K/1V	3.00	3.30	36.0	18.0	non-leadframe
18	JRPI 1004V-1R2M	1.20	100K/1V	3.30	3.80	33.0	17.0	non-leadframe
19	JRPI 1004V-1R5M	1.50	100K/1V	4.00	4.60	33.0	16.0	non-leadframe
20	JRPI 1004V-1R8M	1.80	100K/1V	5.30	6.40	30.0	14.0	leadframe
21	JRPI 1004V-2R2M	2.20	100K/1V	6.50	7.00	27.0	12.0	leadframe
22	JRPI 1004V-2R5M	2.50	100K/1V	7.90	8.70	23.0	11.5	leadframe
23	JRPI 1004V-3R0M	3.00	100K/1V	10.0	11.5	21.0	11.5	leadframe
24	JRPI 1004V-3R3M	3.30	100K/1V	10.8	11.8	20.0	11.0	leadframe
25	JRPI 1004V-3R9M	3.90	100K/1V	12.6	14.5	19.0	10.5	leadframe
26	JRPI 1004V-4R0M	4.00	100K/1V	13.0	15.0	18.0	10.2	leadframe
27	JRPI 1004V-4R7M	4.70	100K/1V	15.0	15.5	17.0	10.0	leadframe
28	JRPI 1004V-5R6M	5.60	100K/1V	17.0	19.3	14.0	9.00	leadframe
29	JRPI 1004V-6R2M	6.20	100K/1V	17.2	21.3	13.7	8.70	leadframe
30	JRPI 1004V-6R5M	6.50	100K/1V	17.3	22.3	13.6	8.60	leadframe
31	JRPI 1004V-6R8M	6.80	100K/1V	17.5	23.3	13.5	8.50	leadframe
32	JRPI 1004V-7R3M	7.30	100K/1V	19.0	21.8	13.0	8.30	leadframe
33	JRPI 1004V-8R2M	8.20	100K/1V	20.0	22.5	12.5	8.00	leadframe
34	JRPI 1004V-100M	10.0	100K/1V	27.0	30.0	12.0	7.50	leadframe
35	JRPI 1004V-150M	15.0	100K/1V	40.0	45.0	10.0	6.25	leadframe
36	JRPI 1004V-180M	18.0	100K/1V	56.0	62.0	9.00	5.50	leadframe
37	JRPI 1004V-220M	22.0	100K/1V	64.0	74.0	7.00	5.00	leadframe
38	JRPI 1004V-270M	27.0	100K/1V	86.0	100	6.00	4.00	leadframe
39	JRPI 1004V-330M	33.0	100K/1V	92.0	112	5.00	3.50	leadframe
40	JRPI 1004V-470M	47.0	100K/1V	145	167	4.50	3.00	leadframe
41	JRPI 1004V-680M	68.0	100K/1V	205	240	3.00	2.00	leadframe
42	JRPI 1004V-820M	82.0	100K/1V	265	320	2.50	1.50	leadframe

Note:

1. All test data referenced to 25°C ambient
2. Saturation Current (Isat) will cause L0 to drop approximately 30%
3. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40°C
4. 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.
5. Special inquiries besides the above common used types can be met on your requirement.

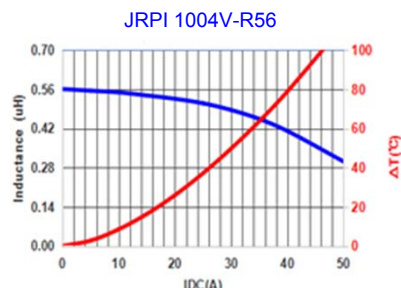
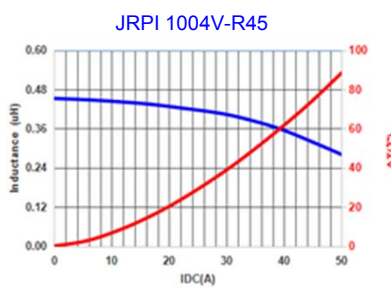
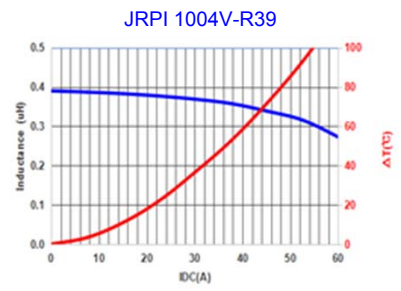
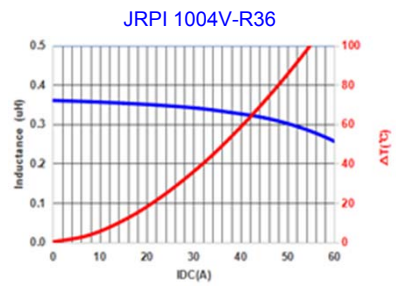
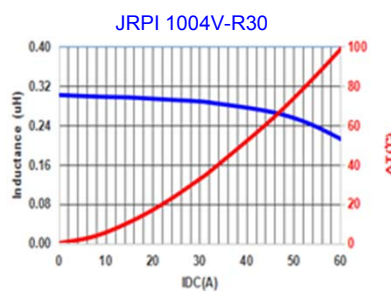
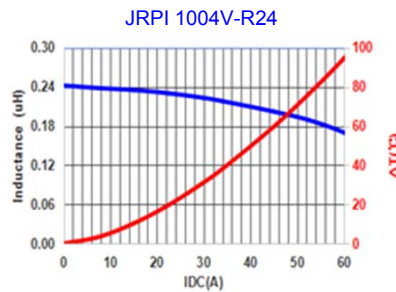
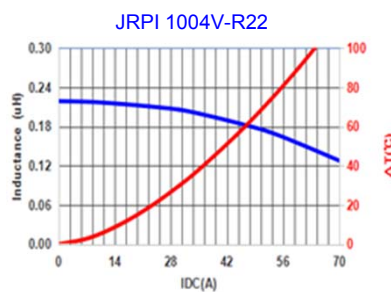
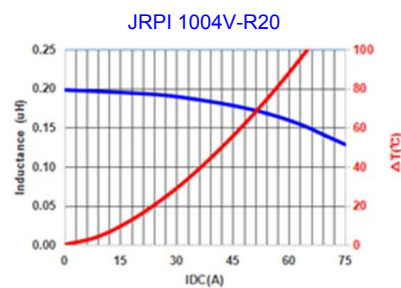
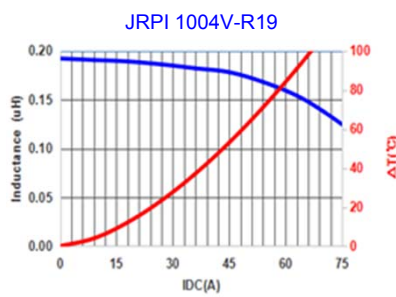
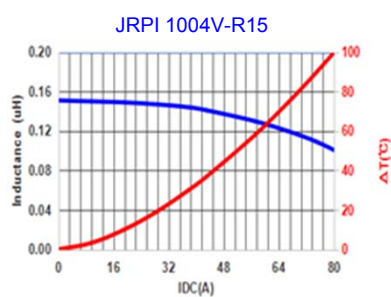
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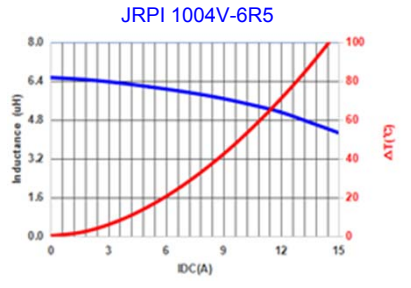
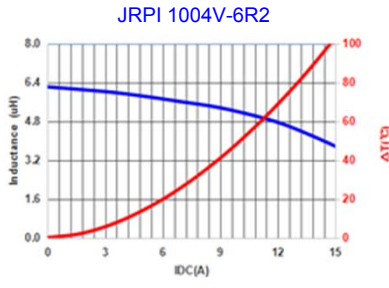
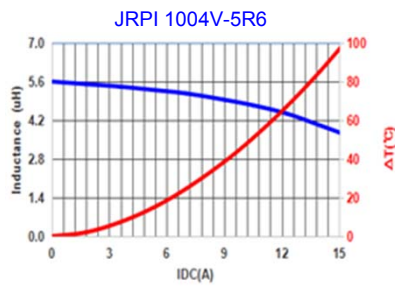
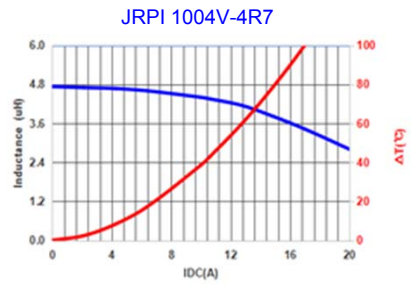
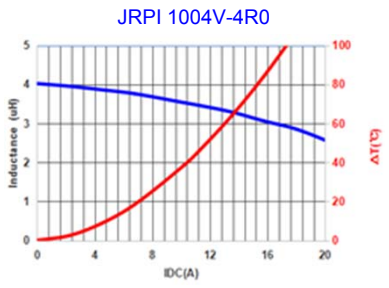
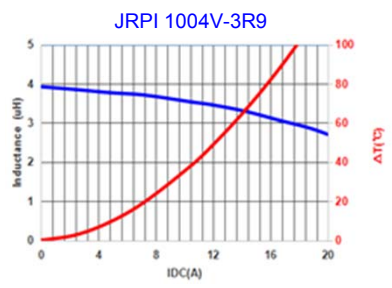
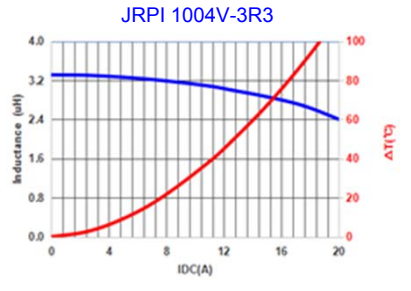
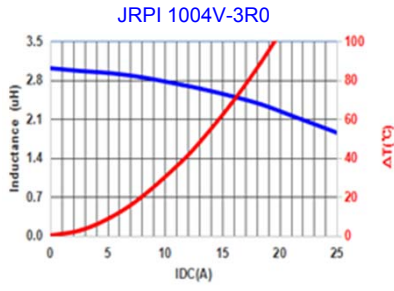
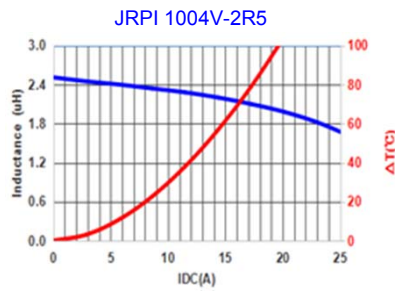
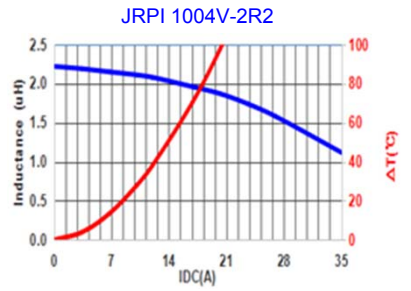
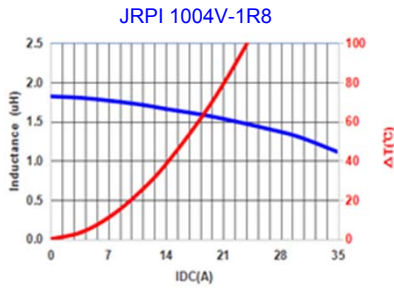
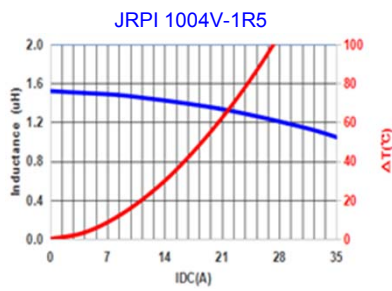
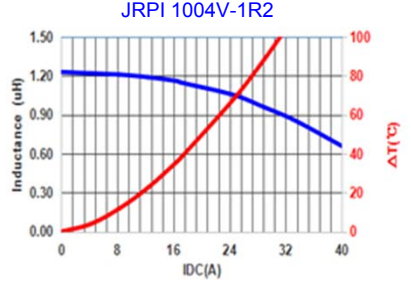
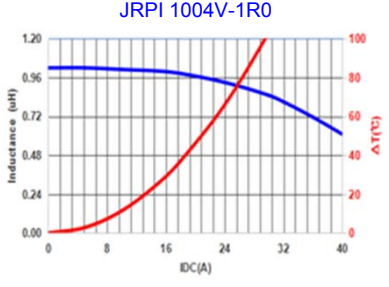
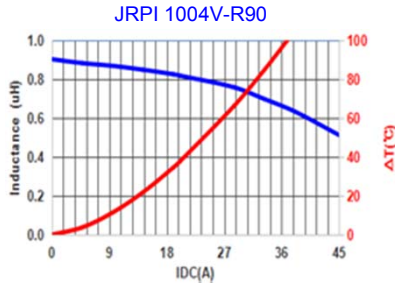
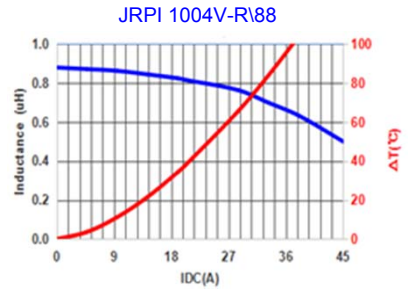
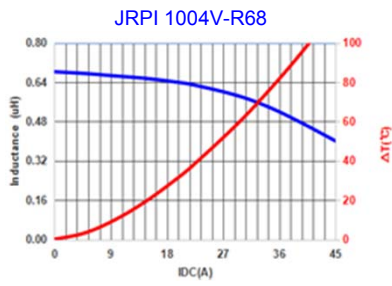


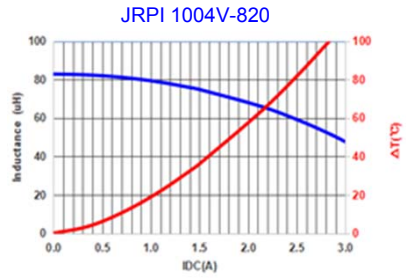
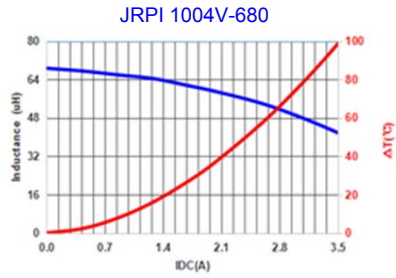
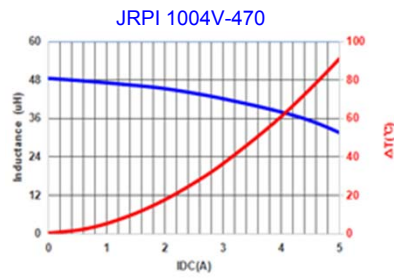
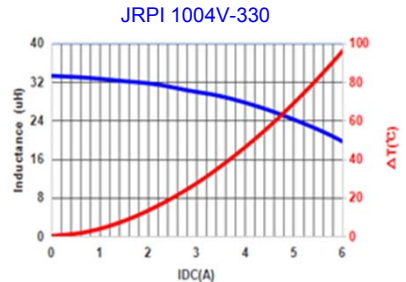
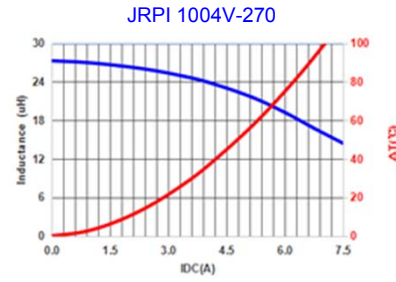
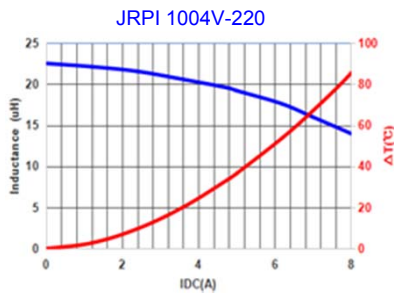
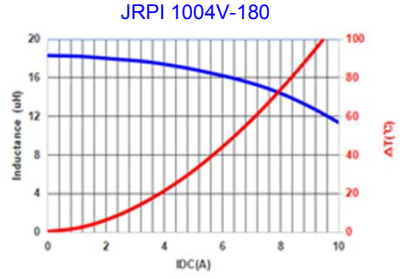
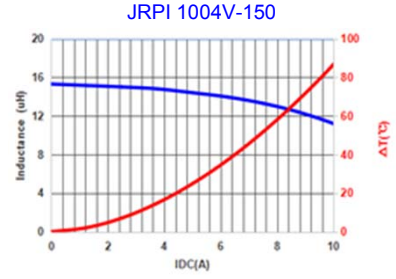
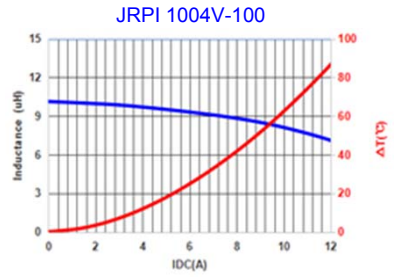
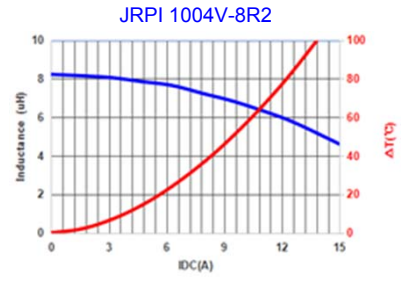
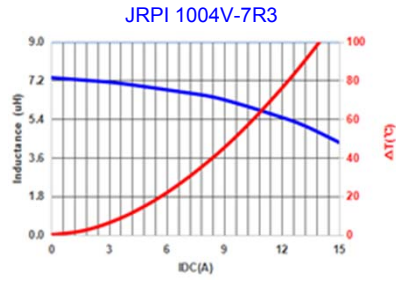
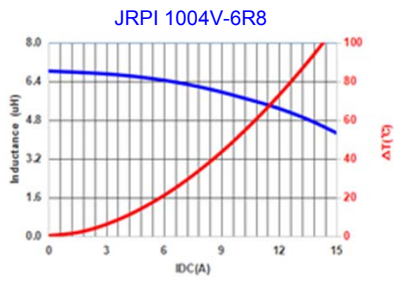
NO	Items	Materials
1	Core	Carbonyl Powder
2	Wire	Polyester Wire or equivalent
3	Clip	100% Pb free solder(Ni+Sn---Plating)
4	Ink	Halogen-free ketone
5	paint	Epoxy resin

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2	Wire	Polyester Wire or equivalent
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Typical Performance Curves

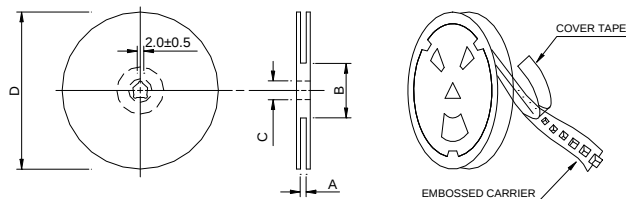






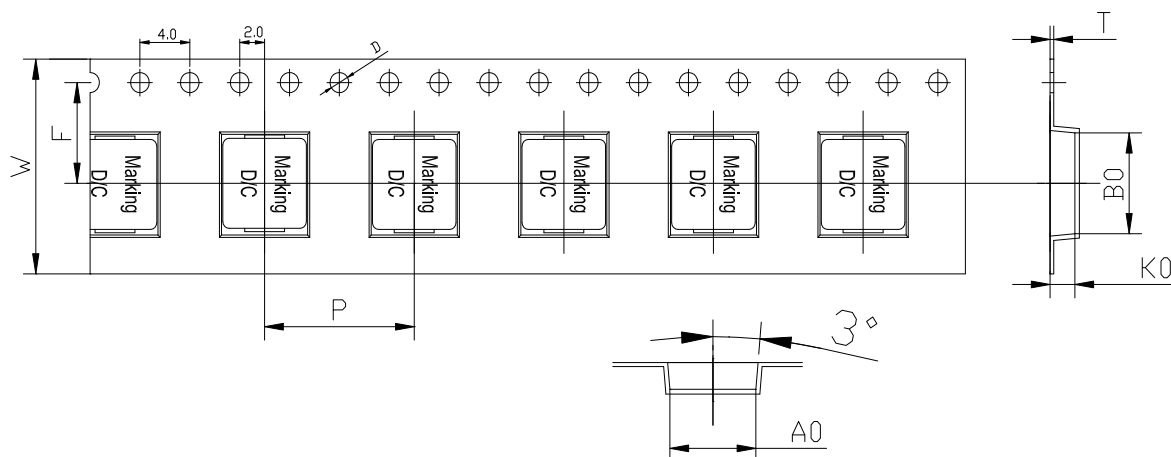
Packaging Information

• 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



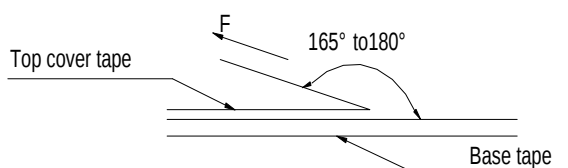
Ao(mm)	Bo(mm)	Ko(mm)	P(mm)	W(mm)	F(mm)	t(mm)	D(mm)
10.4±0.1	11.6±0.1	4.5±0.1	16.0±0.1	24±0.3	11.5±0.1	0.35±0.05	1.5±0.1

• Packaging Quantity

Size	Reel	Inner box	Carton
JRPI 1004V	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.