



PRODUCT IDENTIFICATION

JRPI	0603	V	-	100	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 .

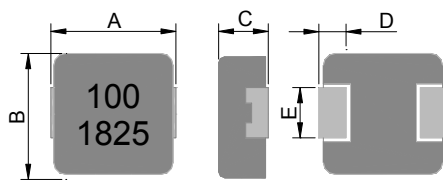
Marking and Date code:

Marking ex:10(μH) → 100

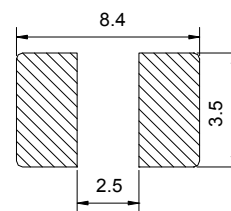
Date code

18 25 → year and weekly

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100及D/C 1825 (18年,25週期)(依實際生產日期而定)

Part No.	Size (mm)				
	A	B	C	D	E
JRPI 0603V	7.3 ± 0.3	6.6 ± 0.3	2.8 ± 0.2	1.8 ± 0.3	3.0 ± 0.3

SERIES LIST

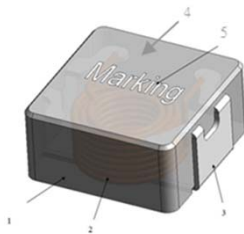
No.	Part No.	L (μH)	TOL. (%)	RDC (mΩ)		I sat (A) Typ.	I rms (A) Typ.
				Typ.	Max.		
1	JRPI 0603V-R10N	0.10	±30	1.2	1.7	60.0	32.5
2	JRPI 0603V-R13N	0.13	±30	1.3	1.8	50.0	27.6
3	JRPI 0603V-R15N	0.15	±30	1.5	1.9	45.0	27.0
4	JRPI 0603V-R16N	0.16	±30	1.5	1.9	45.0	27.0
5	JRPI 0603V-R18N	0.18	±30	1.7	2.3	43.0	25.0
6	JRPI 0603V-R19N	0.19	±30	1.8	2.5	41.0	24.0
7	JRPI 0603V-R20N	0.20	±30	1.8	2.5	41.0	24.0
8	JRPI 0603V-R22N	0.22	±30	2.1	2.8	40.0	23.0
9	JRPI 0603V-R25M	0.25	±20	3.3	3.5	39.0	21.0
10	JRPI 0603V-R30M	0.30	±20	3.2	3.8	35.0	21.0
11	JRPI 0603V-R33M	0.33	±20	3.5	3.9	32.0	20.0
12	JRPI 0603V-R36M	0.36	±20	3.6	4.2	32.0	19.0
13	JRPI 0603V-R40M	0.40	±20	3.71	4.1	27.5	18.0
14	JRPI 0603V-R47M	0.47	±20	4.0	4.2	26.0	17.5
15	JRPI 0603V-R56M	0.56	±20	4.7	5.0	25.5	16.5
16	JRPI 0603V-R60M	0.60	±20	4.7	5.2	25.5	16.0

No.	Part No.	L	TOL.	RDC (mΩ)		I sat (A)	I rms (A)
		(μH)	(%)	Typ.	Max.	Typ.	Typ.
17	JRPI 0603V-R68M	0.68	±20	4.8	5.5	25.0	15.5
18	JRPI 0603V-R75M	0.75	±20	5.5	6.6	24.5	14.5
19	JRPI 0603V-R82M	0.82	±20	6.7	8.0	24.0	13.0
20	JRPI 0603V-R90M	0.90	±20	8.3	10	22.0	11.0
21	JRPI 0603V-1R0M	1.00	±20	8.3	10	22.0	11.0
22	JRPI 0603V-1R2M	1.20	±20	10	12	20.0	10.0
23	JRPI 0603V-1R5M	1.50	±20	13	15	18.0	9.0
24	JRPI 0603V-1R8M	1.80	±20	14	17	16.0	8.5
25	JRPI 0603V-2R0M	2.00	±20	16	19	15.0	8.2
26	JRPI 0603V-2R2M	2.20	±20	18	20	14.0	8.0
27	JRPI 0603V-2R5M	2.50	±20	20	22	13.0	7.0
28	JRPI 0603V-2R7M	2.70	±20	24	27	13.0	7.0
29	JRPI 0603V-3R3M	3.30	±20	28	30	13.5	6.0
30	JRPI 0603V-4R7M	4.70	±20	37	40	10.0	5.5
31	JRPI 0603V-5R6M	5.60	±20	43	48	9.0	5.0
32	JRPI 0603V-6R8M	3.80	±20	54	60	8.0	4.5
33	JRPI 0603V-8R2M	8.20	±20	64	68	7.5	4.0
34	JRPI 0603V-100M	10.0	±20	75	85	6.0	3.5
35	JRPI 0603V-120M	12.0	±20	81	93	5.5	3.3
36	JRPI 0603V-150M	15.0	±20	107	123	4.0	3.0
37	JRPI 0603V-180M	18.0	±20	140	160	4.0	2.5
38	JRPI 0603V-220M	22.0	±20	165	190	3.5	2.0
39	JRPI 0603V-330M	33.0	±20	200	240	2.5	2.0
40	JRPI 0603V-470M	47.0	±20	302	363	2.00	1.75

Note:

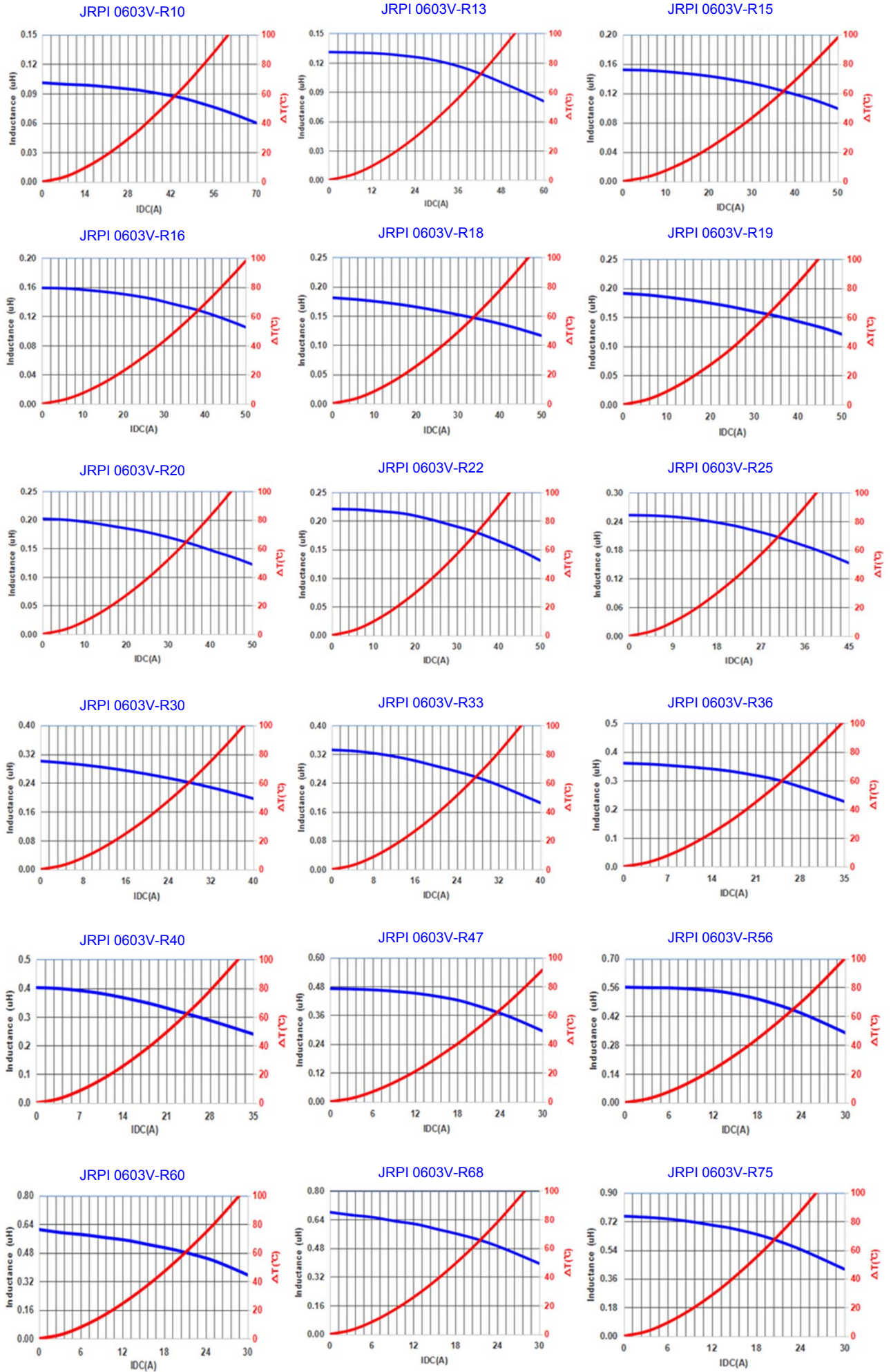
1. Test Frequency: 100KHz /1V
2. All test data referenced to 25°C ambient
3. Saturation Current (Isat) will cause L0 to drop approximately 30%.
4. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40°C
5. The part temperature (ambient + temp rise) should not exceed 125°C 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. Special inquiries besides the above common used types can be met on your requirement.

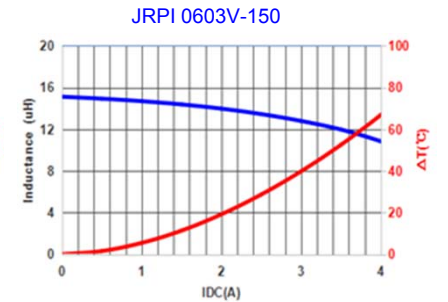
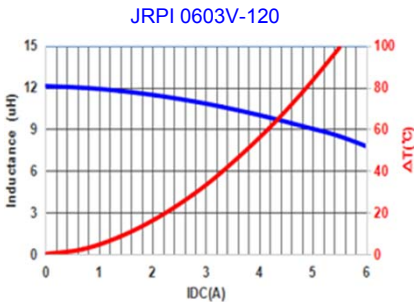
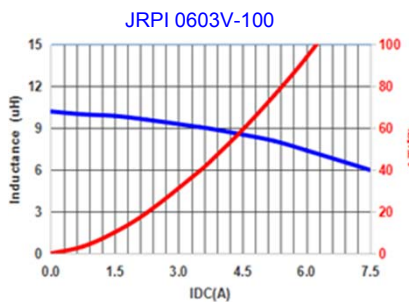
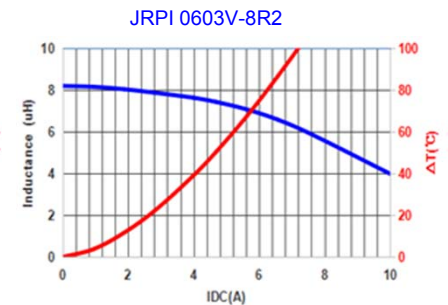
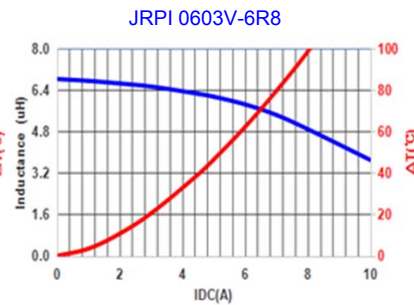
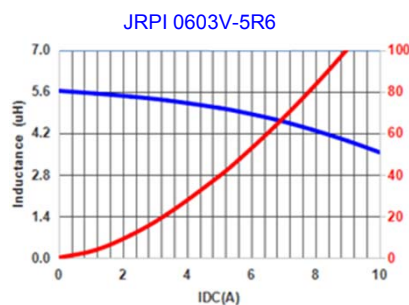
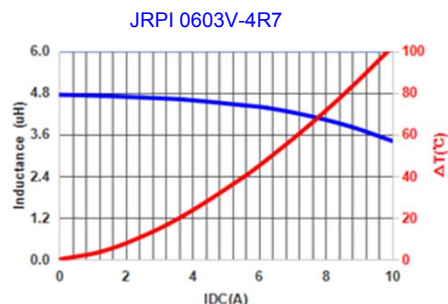
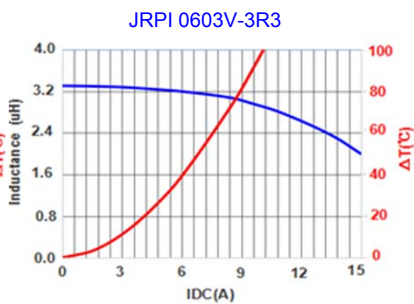
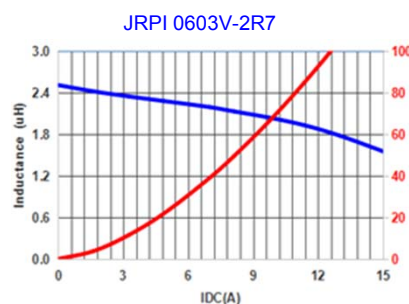
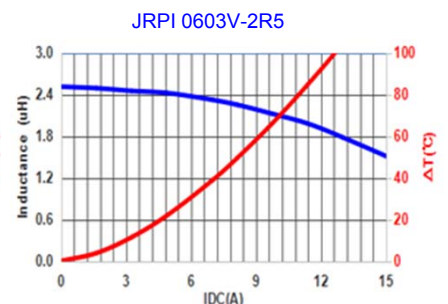
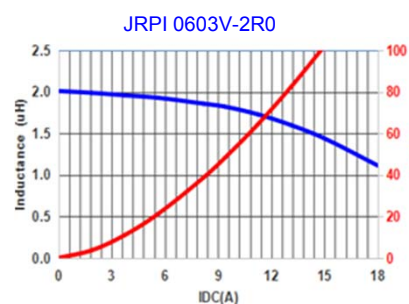
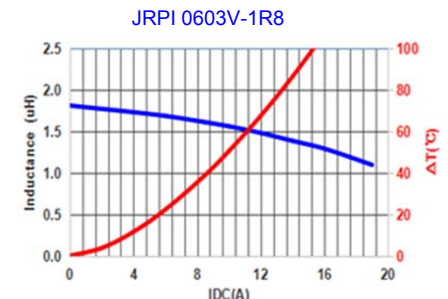
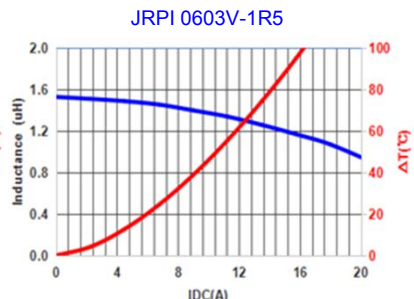
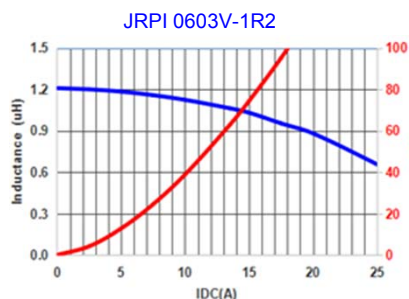
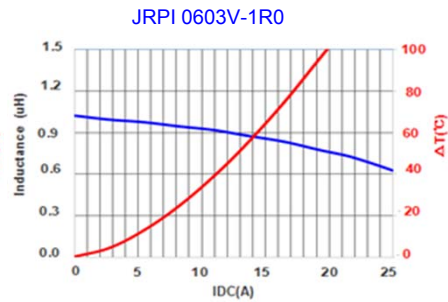
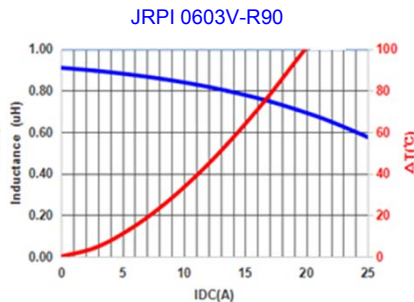
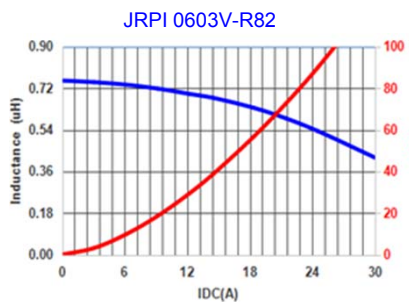
Materials



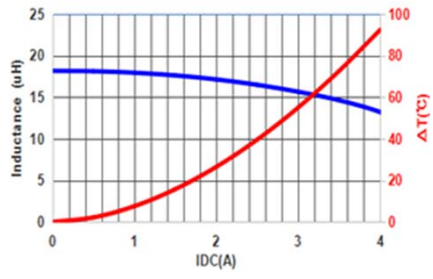
NO	Items	Materials
1	Core	Carbonyl Powder
2	Wire	Polyester Wire or equivalent
3	Clip	100% Pb free solder(Ni+Sn---Plating)
4	paint	Epoxy resin
5	Ink	Halogen-free ketone

TYPICAL PERFORMANCE CURVES

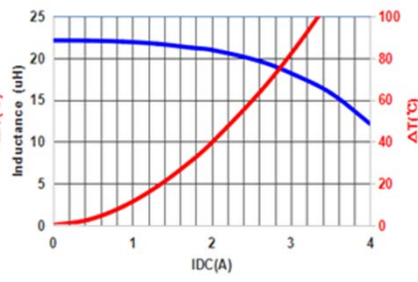




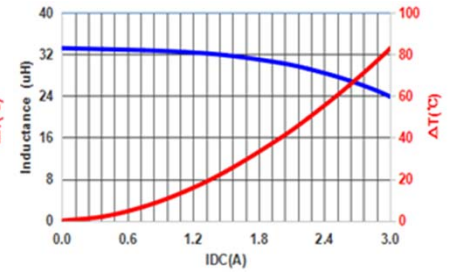
JRPI 0603V-180



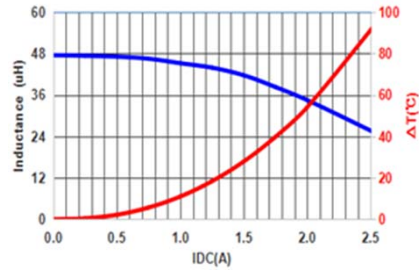
JRPI 0603V-220



JRPI 0603V-330

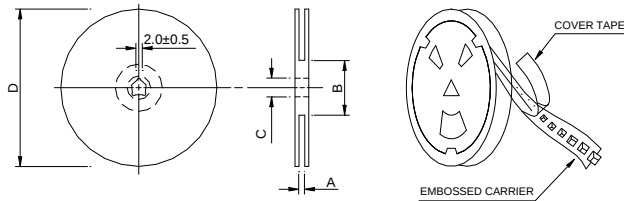


JRPI 0603V-470



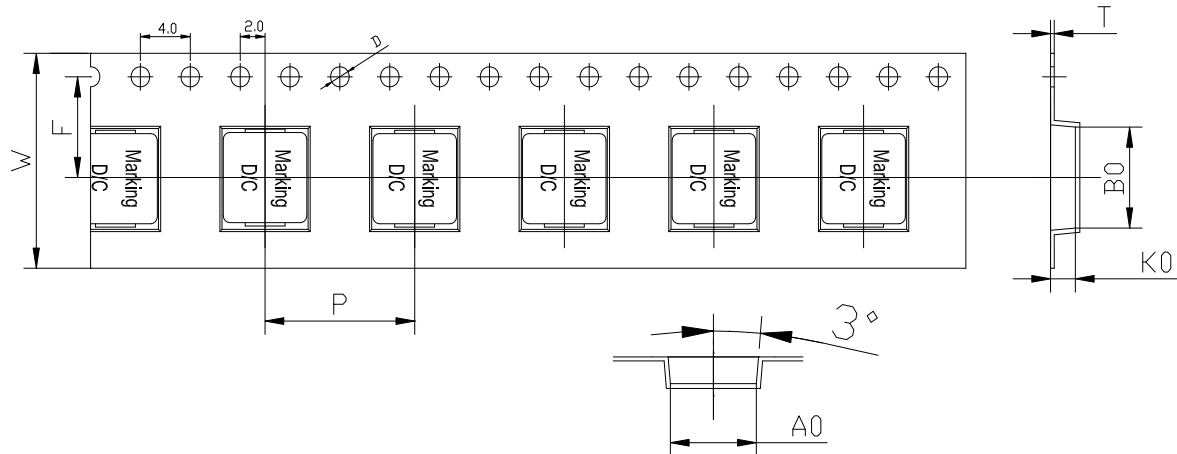
Packaging Information

• 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

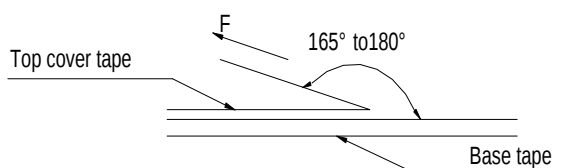


Ao(mm)	Bo(mm)	Ko(mm)	P(mm)	W(mm)	F(mm)	t(mm)	D(mm)
7.0±0.1	7.7±0.1	3.3±0.1	12.0±0.1	16±0.3	7.5±0.1	0.35±0.05	1.5±0.1

• Packaging Quantity

Size	Reel	Inner box	Carton
JRPI 0603V	1000	2000	8000

• 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.