



PRODUCT IDENTIFICATION

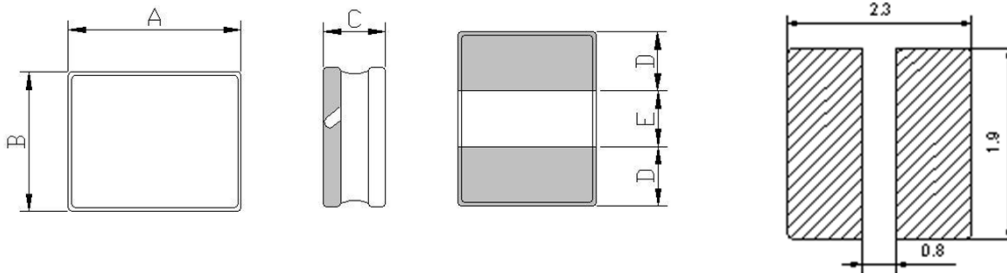
JNR	201610	F	-	R47	M
Type	Size				Tol.
		Lead Free		Inductance	

FEATURES

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.

DIMENSIONS (mm)

Recommended PC Board Pattern



Part No.	Size (mm)				
	A	B	C	D	E
JNR 201610F	2.0 -0.1/+0.2	1.6 -0.1/+0.2	1.0 Max	0.50 ref	1.00 ref

SERIES LIST

No.	Part No.	L (μH)	TOL. (%)	RDC (Ω)		I sat (A)		I rms (A)		Glue
				Max.	Typ.	Max.	Typ.	Max.	Typ.	
1	JNR 201610F-R24M	0.24	±20	0.020	0.015	6.50	7.50	5.10 (1) 5.50 (2)	5.70 (1) 6.50 (2)	magnetic powder
2	JNR 201610F-R33M	0.33	±20	0.023	0.018	5.00	5.50	5.00 (1) 5.20 (2)	5.50 (1) 5.60 (2)	magnetic powder
3	JNR 201610F-R47M	0.47	±20	0.029	0.024	4.50	5.20	4.30 (1) 4.70 (2)	4.70 (1) 5.30 (2)	magnetic powder
4	JNR 201610F-R68M	0.68	±20	0.044	0.036	4.40	5.10	3.50 (1) 3.80 (2)	3.90 (1) 4.20 (2)	magnetic powder
5	JNR 201610F-1R0M	1.00	±20	0.060	0.050	4.00	4.50	2.90 (1) 3.10 (2)	3.20 (1) 3.40 (2)	magnetic powder
6	JNR 201610F-1R5M	1.50	±20	0.082	0.068	2.80	3.20	2.50 (1) 2.70 (2)	2.90 (1) 3.10 (2)	magnetic powder
7	JNR 201610F-2R2M	2.20	±20	0.120	0.100	2.40	2.70	2.00 (1) 2.10 (2)	2.20 (1) 2.30 (2)	magnetic powder
8	JNR 201610F-3R3M	3.30	±20	0.192	0.150	1.70	2.00	1.60 (1) 1.80 (2)	1.80 (1) 2.00 (2)	magnetic powder
9	JNR 201610F-4R7M	4.70	±20	0.216	0.180	1.40	1.60	1.40 (1) 1.60 (2)	1.60 (1) 1.80 (2)	magnetic powder

Note:

1. Test Frequency: 1MHz /1V
2. All test data referenced to 25°C ambient
3. Isat : Based on inductance change ($\Delta L/L_0 : \leq 30\%$)
4. Irms : Based on temperature rise ($\Delta T : 40^\circ\text{C}.$) Max

Measurement board data

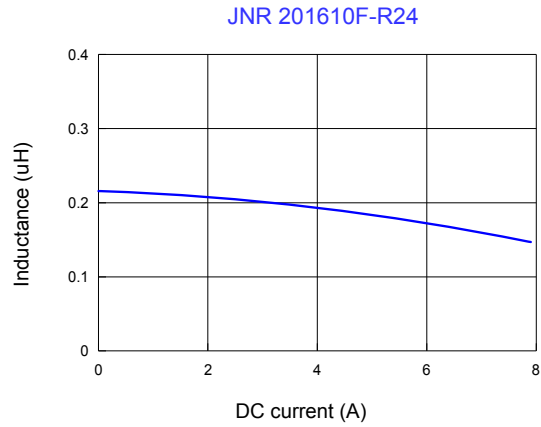
Irms1

Material : FR4

Board dimensions : 100 X 50 X 1.6t mm

Pattern dimensions: 45 X 30 mm (Double side board)

Pattern thickness : 50 μ m



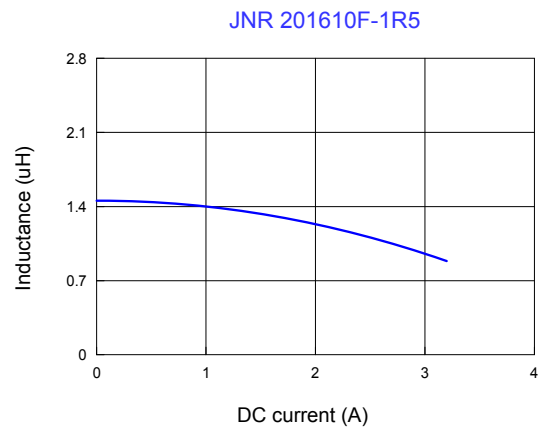
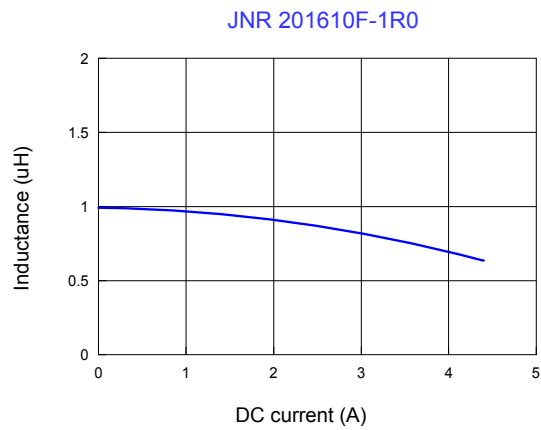
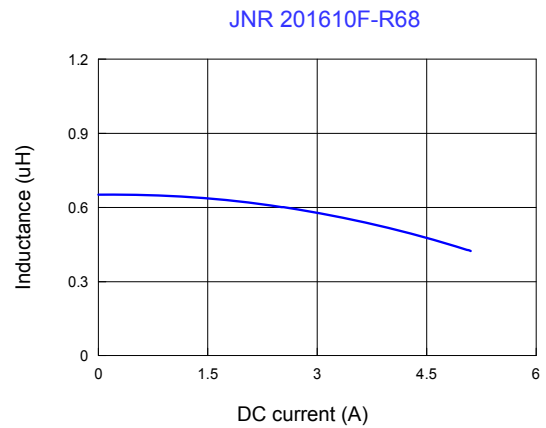
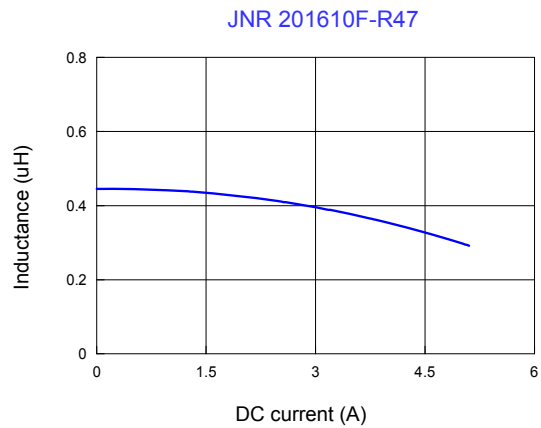
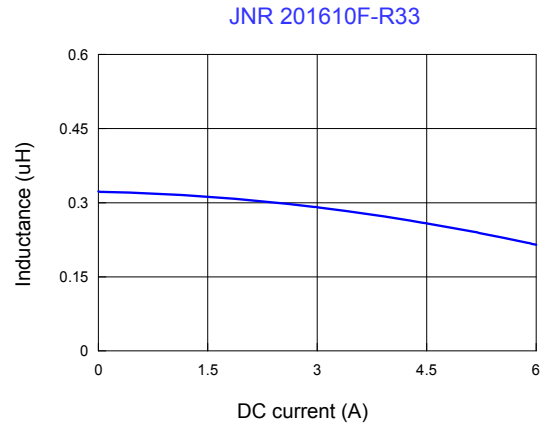
Irms2

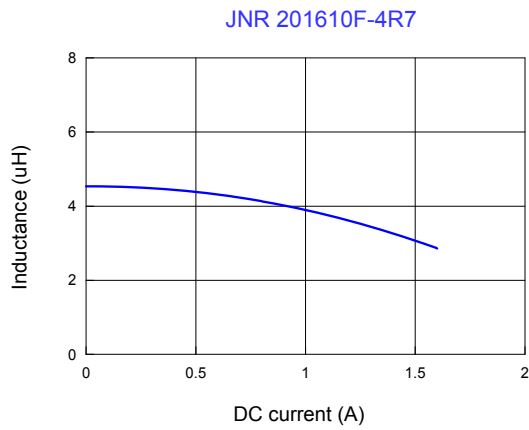
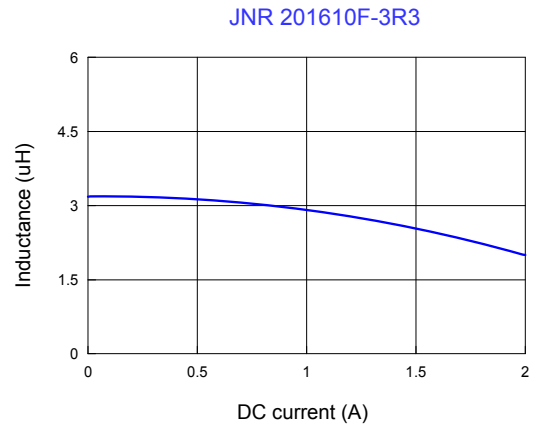
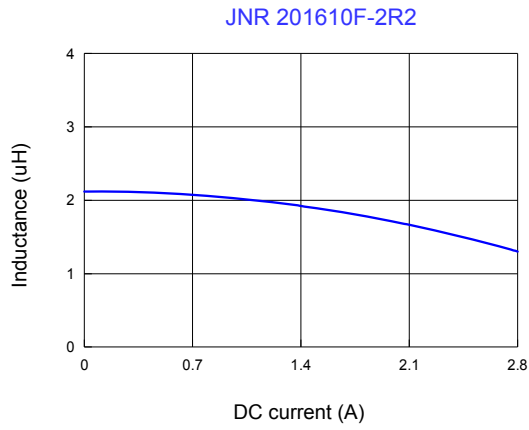
Material : FR4

Board dimensions : 100 X 50 X 1.6t mm

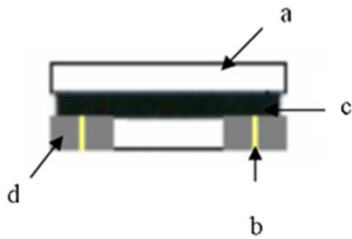
Pattern dimensions: 45 X 45 mm (Double side board)

Pattern thickness : 70 μ m

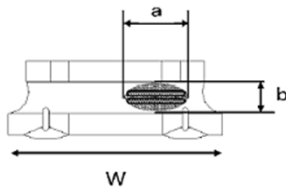




Materials



No.	Description	Specification
a	Core	Metal Core
b	Wire	Enameled Copper Wire
c	Glue	Epoxy with magnetic powder
d	Terminal	Ag/Ni/Sn

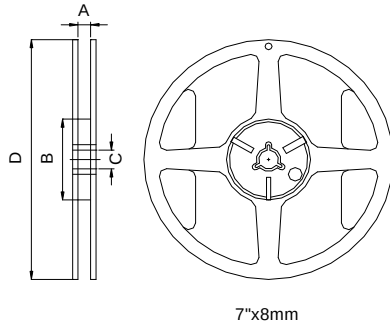


Appearance of exposed wire tolerance limit :

1. Width direction (dimension a) : Acceptable when $a \leq w/2$
Nonconforming when $a > w/2$
2. Length direction (dimension b) : Dimension b is not specified.
3. The total area of exposed wire occurring to each sides is not greater than 50% of coating resin area, and is acceptable.

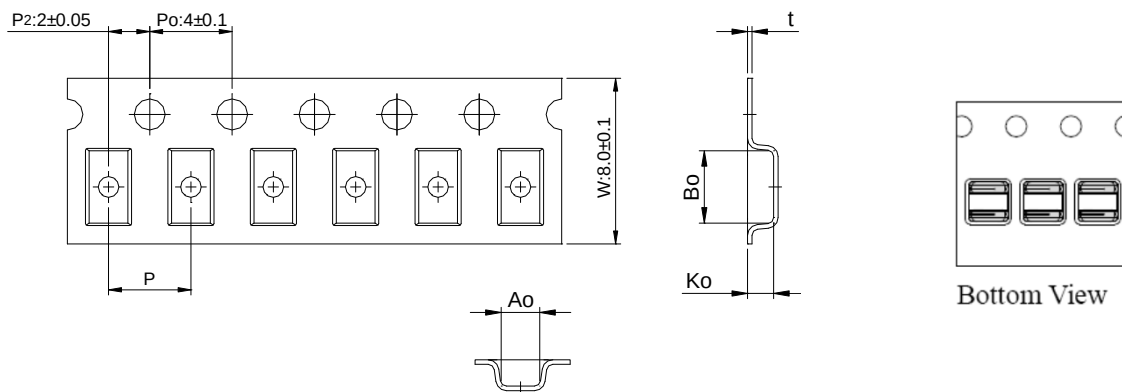
Packaging Information

• Reel Dimension



Type	A(mm)	B(mm)	C(mm)	D(mm)
7"x8mm	8.4±1.0	50 min.	13±0.8	178±2

• Tape Dimension



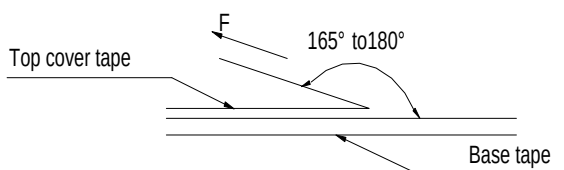
Ao(mm)	Bo(mm)	Ko(mm)	P(mm)	t(mm)
2.0±0.1	2.5±0.1	1.40±0.1	4.0±0.1	0.23±0.05

• Packaging Quantity

Size	Reel
JNR 201610F	2000

• Tearing Off Force

The force for tearing off cover tape is 15 to 80 grams in the arrow direction under the following conditions



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.