



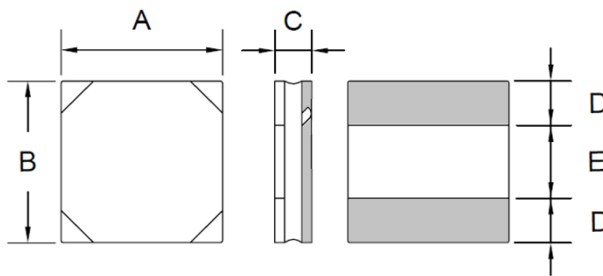
PRODUCT IDENTIFICATION

JNR	3012	P	-	100	M
Type	Size	Lead Free			Tol.
				Inductance	

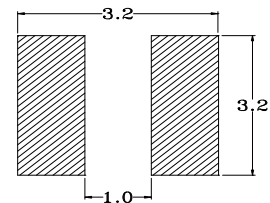
FEATURES

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
3. Operating temperature :-40~+125°C (Including self - temperature rise)

DIMENSIONS (mm)



Recommended PC Board Pattern



Part No.	Size (mm)				
	A	B	C	D	E
JNR 3012P	3.0±0.2	3.0±0.2	1.2 max.	1.0 ref.	1.0 ref.

SERIES LIST

No.	Part No.	L	Tol.	Test Frequency	RDC (Ω)		Isat (A)		Irms (A)	
		(μH)		(Hz)	typ.	Max.	typ.	Max.	typ.	Max.
1	JNR 3012P-R33M	0.33	±20%	1M/1V	0.020	0.024	9.00	7.00	5.50	4.50
2	JNR 3012P-R47M	0.47	±20%	1M/1V	0.025	0.030	7.50	6.50	5.20	4.20
3	JNR 3012P-R68M	0.68	±20%	1M/1V	0.032	0.038	6.50	5.50	4.50	3.70
4	JNR 3012P-1R0M	1.00	±20%	1M/1V	0.042	0.049	5.20	4.50	4.00	3.50
5	JNR 3012P-1R5M	1.50	±20%	1M/1V	0.060	0.072	4.50	4.00	3.50	3.00
6	JNR 3012P-2R2M	2.20	±20%	1M/1V	0.090	0.108	3.60	3.00	2.80	2.30
7	JNR 3012P-3R3M	3.30	±20%	1M/1V	0.130	0.156	3.00	2.50	2.10	1.70
8	JNR 3012P-4R7M	4.70	±20%	1M/1V	0.180	0.216	2.60	2.30	1.80	1.50
9	JNR 3012P-6R8M	6.80	±20%	1M/1V	0.250	0.300	2.20	1.90	1.50	1.30
10	JNR 3012P-100M	10.0	±20%	1M/1V	0.290	0.350	1.50	1.30	1.40	1.20

Note:

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

Measurement board data

Material : FR4

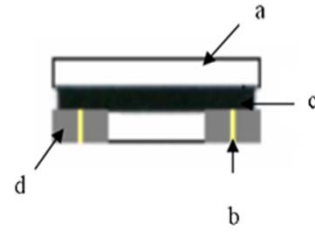
Board dimensions : 100 X 50 X 1.6t mm

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

Pattern thickness : 50 μm

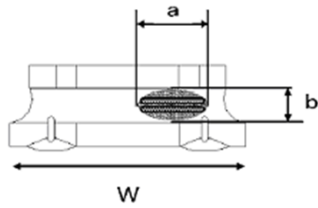
Materials

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



Void appearance tolerance Limit

Size of voids occurring to coating resin is specified below

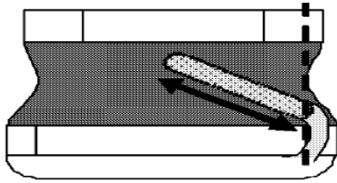


Appearance of exposed wire tolerance limit :

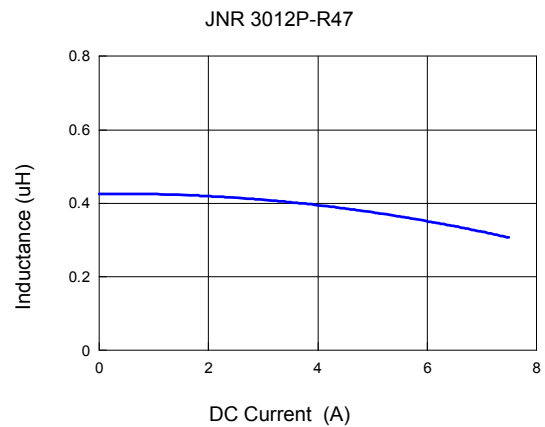
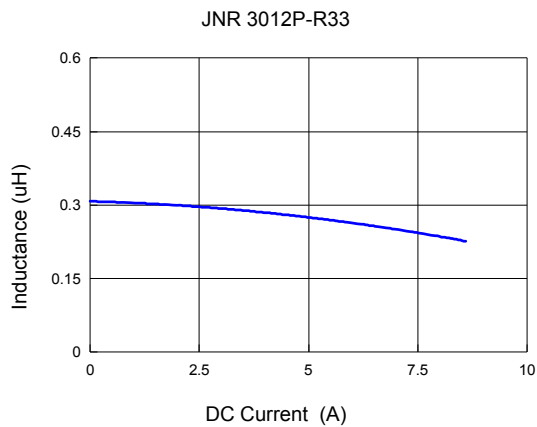
- 1.Width direction (dimension a) : Acceptable when $a \leq w/2$
Nonconforming when $a > w/2$
- 2.Length direction (dimension b) : Dimension b is not specified.
- 3.The total area of exposed wire occurring to each sides is not greater than 50% of coating resin area, and is acceptable.

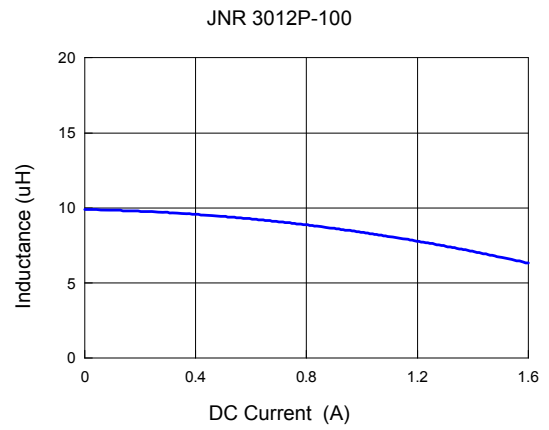
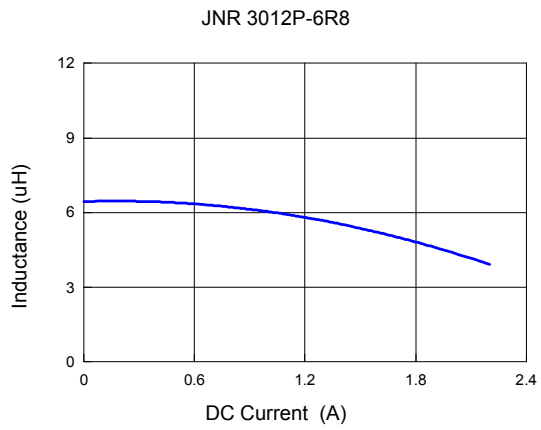
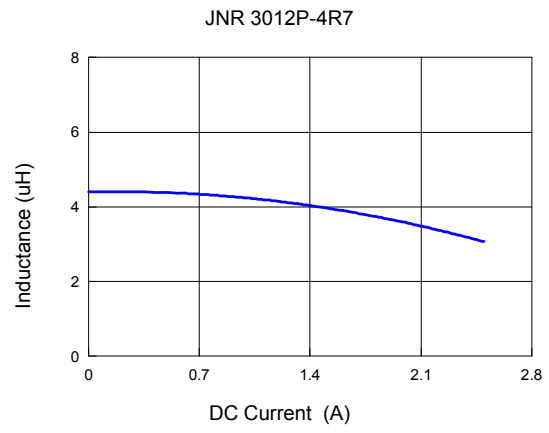
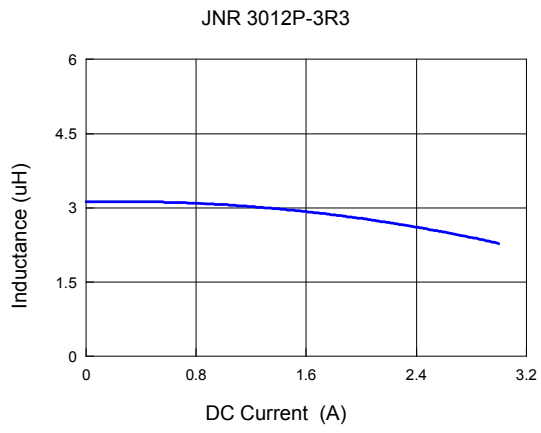
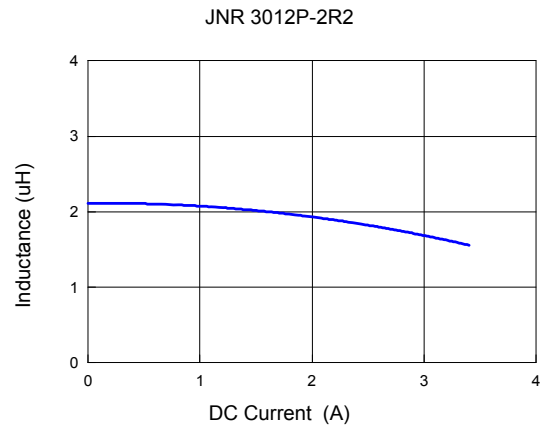
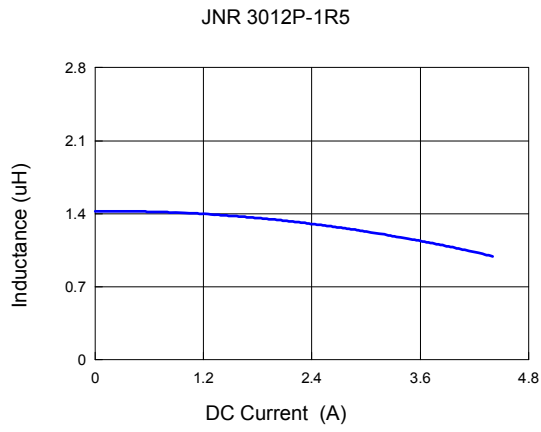
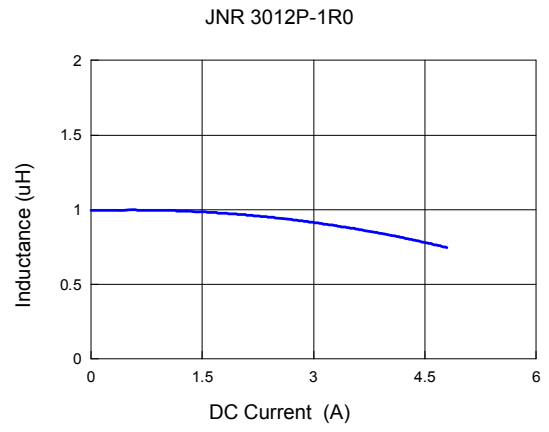
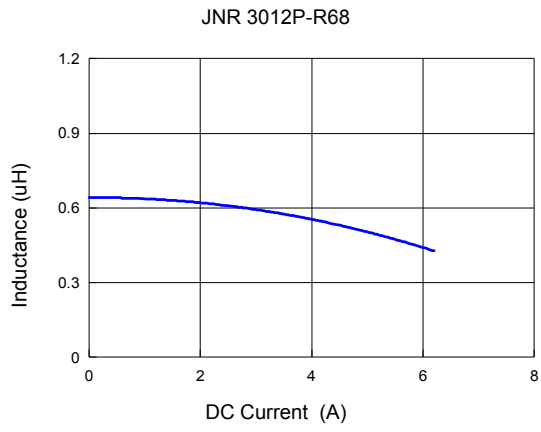
External appearance criterion for exposed wire

Exposed end of the winding wire at the secondary side should be 2mm and below



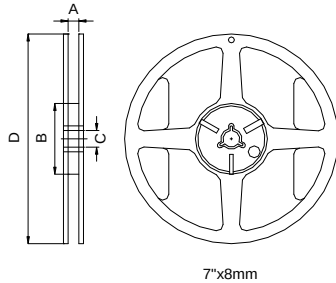
Typical Performance Curves





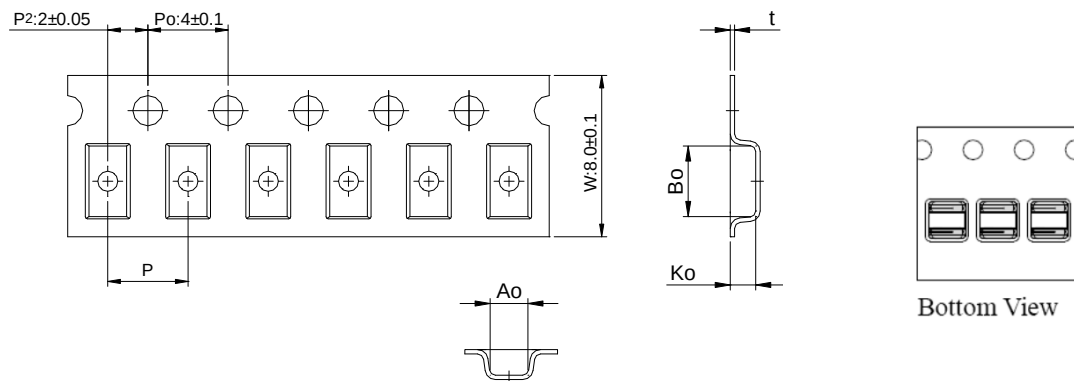
Packaging Information

• 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



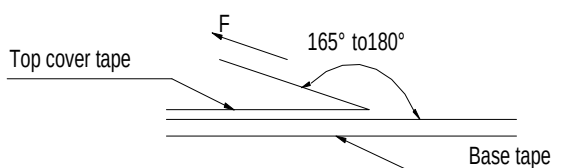
Ao(mm)	Bo(mm)	Ko(mm)	P(mm)	t(mm)
3.2±0.05	3.2±0.05	1.40±0.2	4.0±0.05	0.23±0.05

• Packaging Quantity

Size	Reel
JNR 3012P	2000

• Tearing Off Force

The force for tearing off cover tape is 10 to 100 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.