



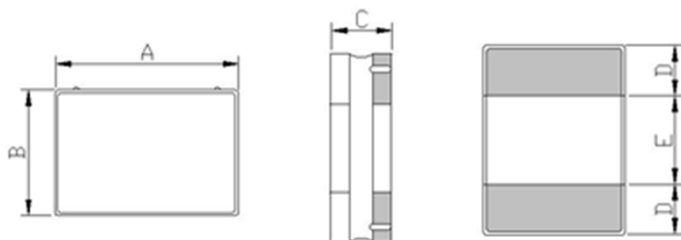
PRODUCT IDENTIFICATION

JNR **252010** **R** **-** **4R7** **M**
 | | | | |
Type **Size** **Lead Free** **Inductance** **Tol.**

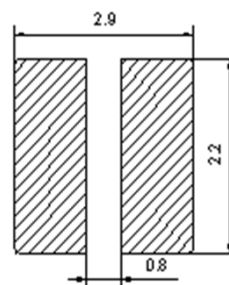
FEATURES

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 252010R	2.50±0.20	2.00±0.20	0.90±0.10	0.80±0.20	0.95±0.20

SERIES LIST

No.	Part No.	L (μH)	TOL. (%)	RDC (Ω)		I sat (A)		I rms (A)	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
1	JNR 252010R-R24M	0.24	±20	0.028	0.022	7.0	7.5	5.0	5.5
2	JNR 252010R-R33M	0.33	±20	0.030	0.025	5.5	6.0	4.3	4.8
3	JNR 252010R-R47M	0.47	±20	0.040	0.035	4.9	5.5	3.8	4.3
4	JNR 252010R-R56M	0.56	±20	0.048	0.040	4.2	4.8	3.6	4.0
5	JNR 252010R-R68M	0.68	±20	0.054	0.045	3.8	4.4	3.4	3.8
6	JNR 252010R-1R0M	1.00	±20	0.071	0.062	3.1	3.6	2.8	3.3
7	JNR 252010R-1R2M	1.20	±20	0.080	0.070	2.8	3.2	2.6	2.9
8	JNR 252010R-1R5M	1.50	±20	0.090	0.080	2.6	2.9	2.4	2.7
9	JNR 252010R-2R2M	2.20	±20	0.132	0.120	2.1	2.4	2.0	2.3
10	JNR 252010R-3R3M	3.30	±20	0.216	0.190	1.8	2.1	1.4	1.7
11	JNR 252010R-4R7M	4.70	±20	0.276	0.245	1.4	1.7	1.2	1.4
12	JNR 252010R-100M	10.0	±20	0.610	0.530	1.2	1.3	0.8	1.0

Note:

1. Test Frequency: 1MHz /1V
2. All test data referenced to 25°C ambient
3. Saturation Current (Isat) will cause L0 to drop approximately 30%

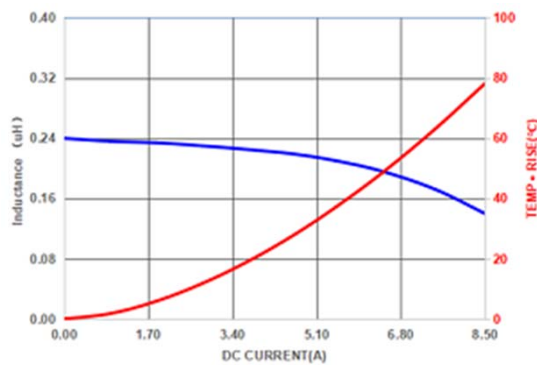
4. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40°C

5. Irms Testing :

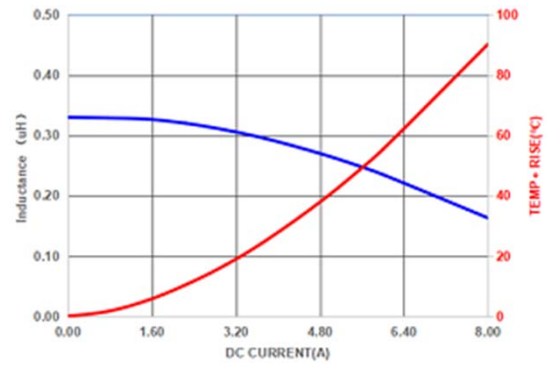
Temperature rise is highly dependent on many factors including pcb land pattern , Circuit design, component placement,frequency,cooling system, trace size , and proximity to other components.....etc , There fore temperature rise should be verified in application conditions .

■ Typical Performance Curves

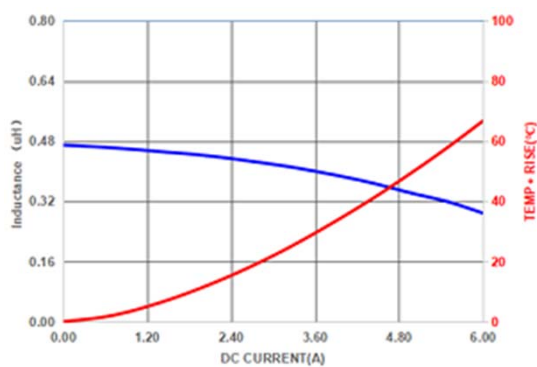
JNR 252010R-R24



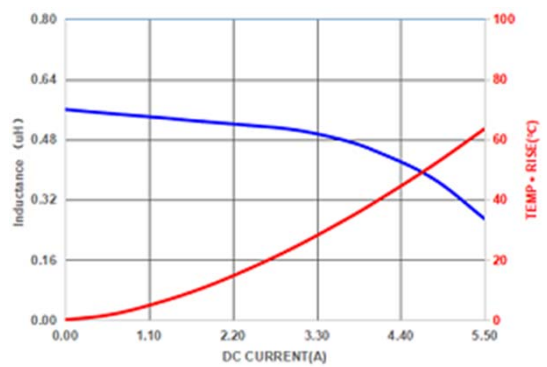
JNR 252010R-R33



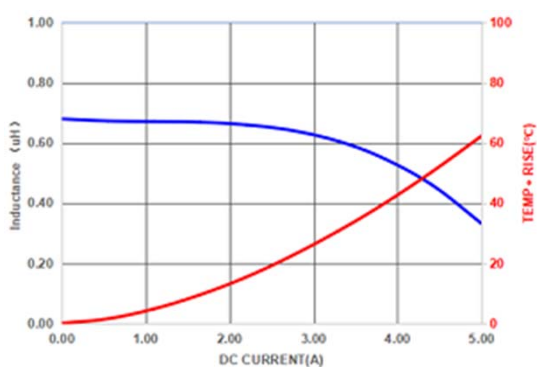
JNR 252010R-R47



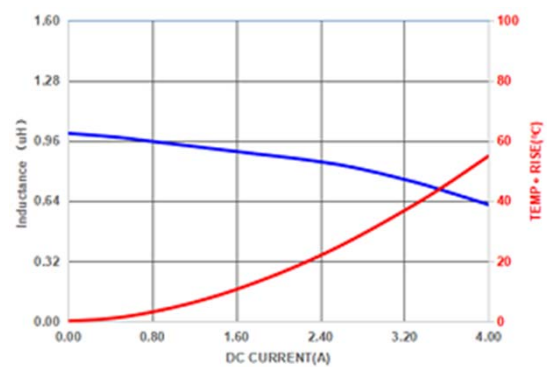
JNR 252010R-R56



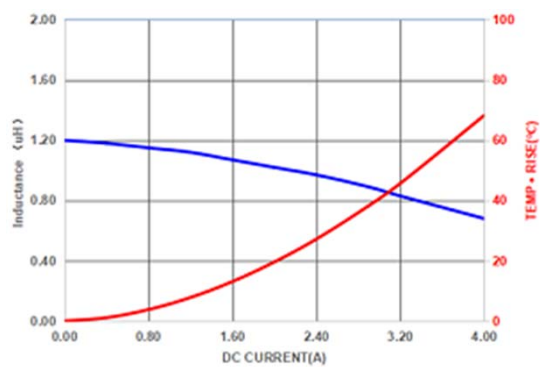
JNR 252010R-R68



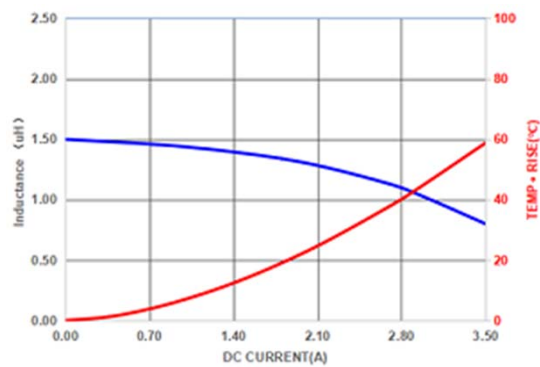
JNR 252010R-1R0



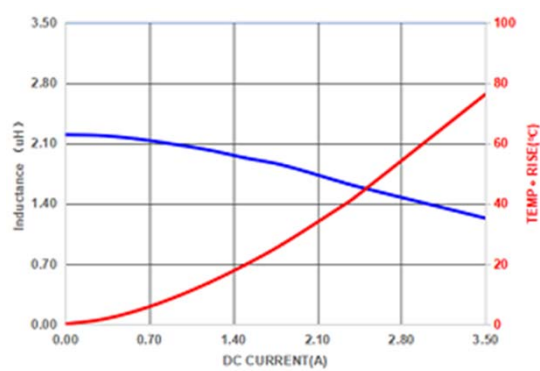
JNR 252010R-1R2



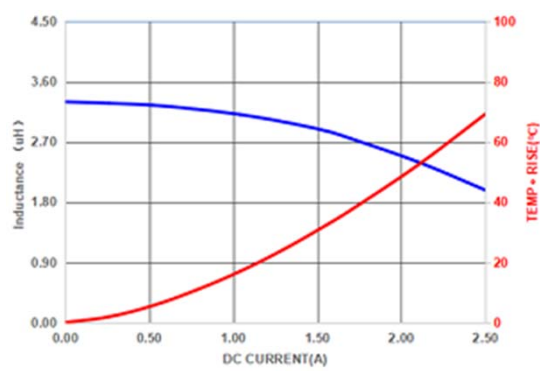
JNR 252010R-1R5



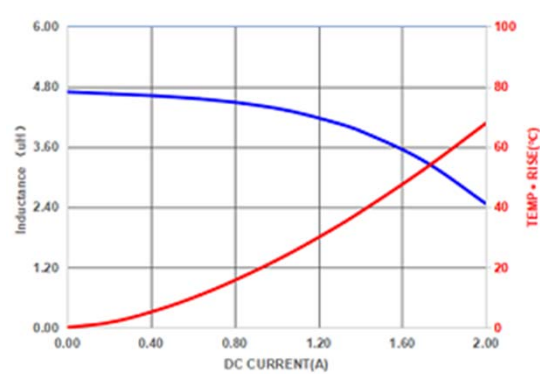
JNR 252010R-2R2



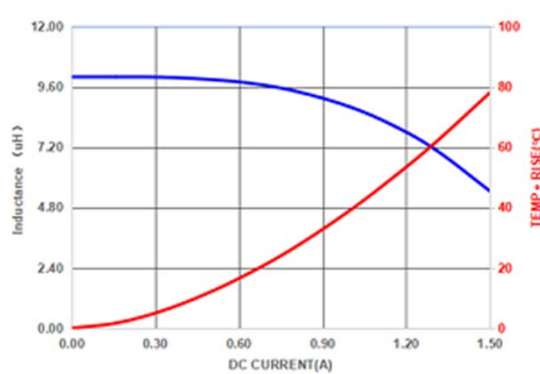
JNR 252010R-3R3



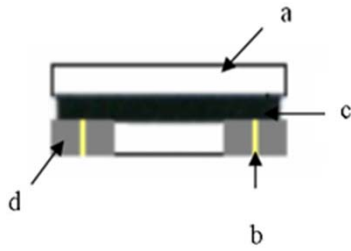
JNR 252010R-4R7



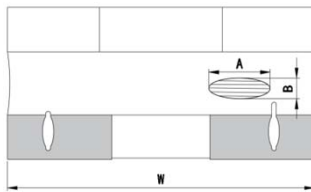
JNR 252010R-100



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 $a \leq w/2$

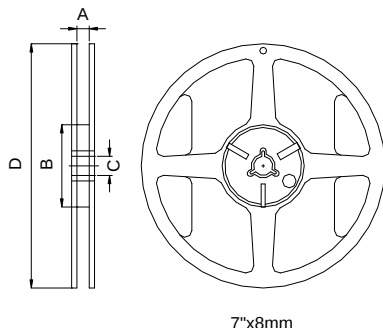
Nonconforming when $a > w/2$

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.

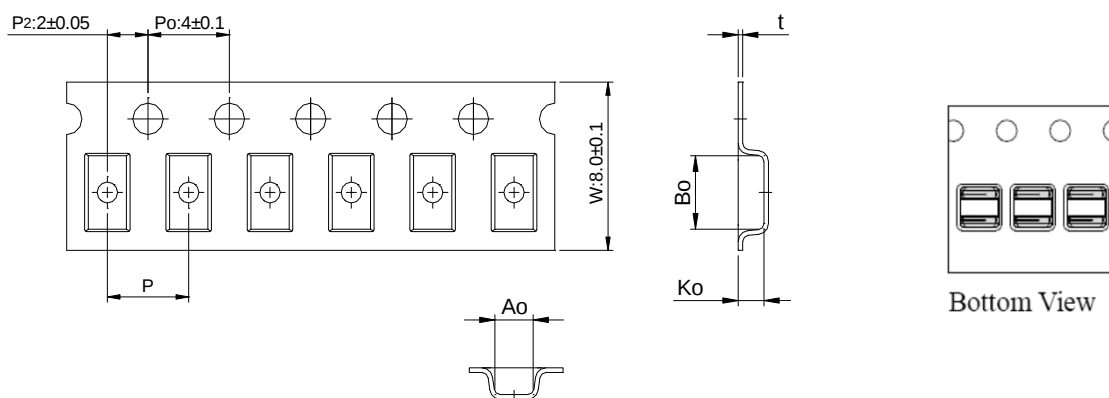
Packaging Information

• Reel Dimension



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

• Tape Dimension



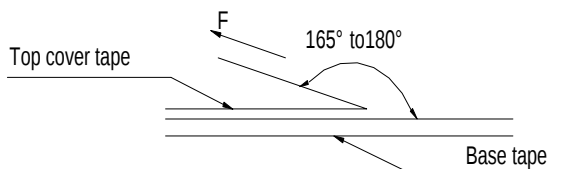
Ao(mm)	Bo(mm)	Ko(mm)	P(mm)	t(mm)
2.45 $\pm$ 0.1	3.10 $\pm$ 0.1	1.40 $\pm$ 0.1	4.0 $\pm$ 0.1	0.23 $\pm$ 0.05

• Packaging Quantity

Size	Reel
JNR 252010R	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.