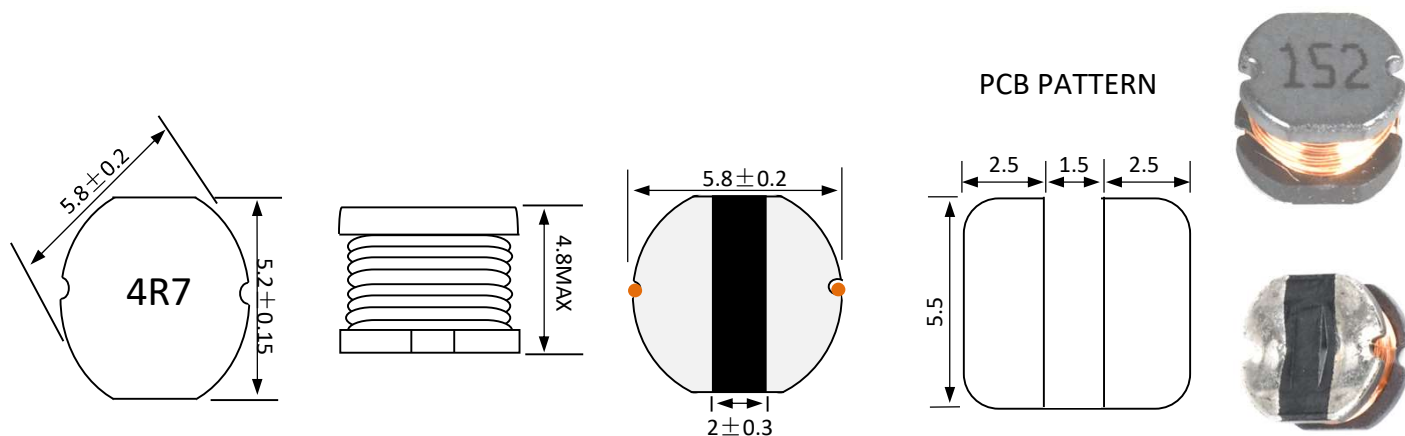
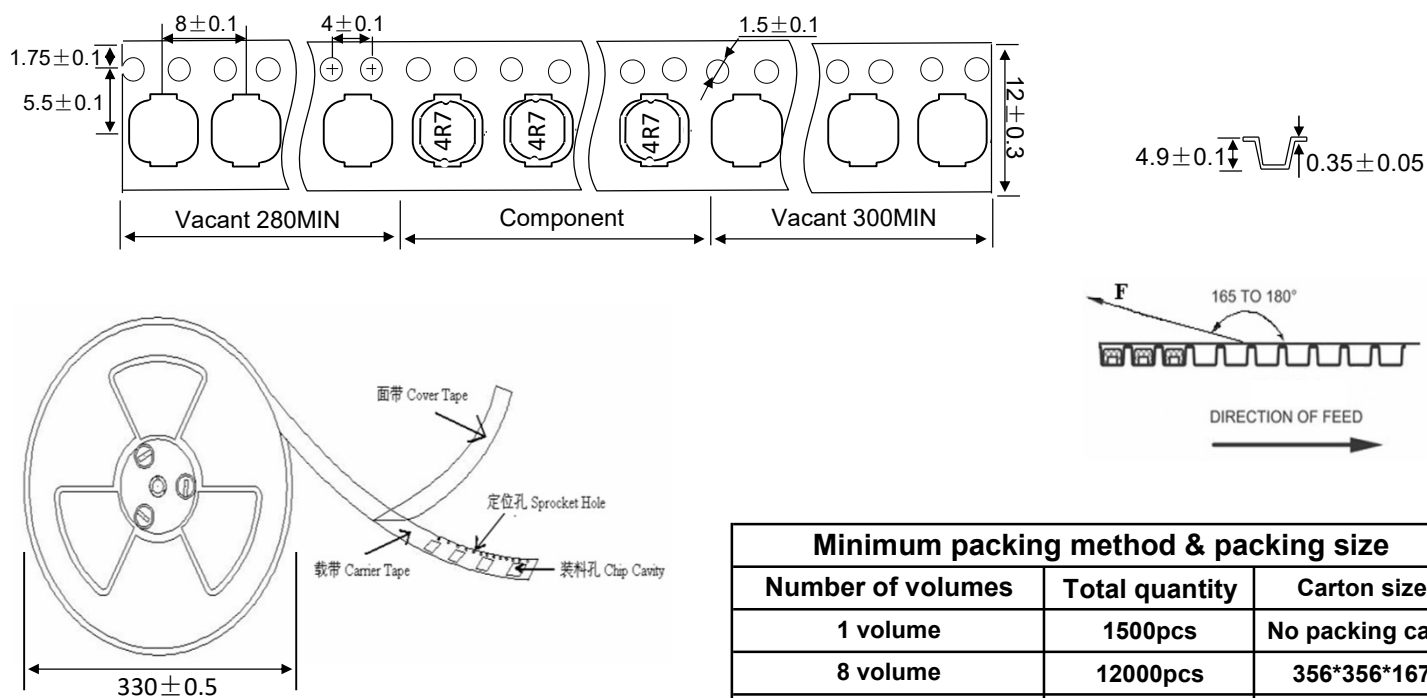


Power Inductors

● Dimension & Appearance (Unit:mm)



● Packing method and dimension and Printing Direction(Unit:mm)



Minimum packing method & packing size

Number of volumes	Total quantity	Carton size
1 volume	1500pcs	No packing case
8 volume	12000pcs	356*356*167
12 volume	18000pcs	358*358*252

● Material list

Item	Material Name	Material Spec	The supplier
1	Magnetic materials	JN4H DR5.8*4.5 B2.5 F2.5 T0.45	castle technology & Equal manufacturer
2	Enameled wire	2UEW 180℃	Elektrisola & Equal manufacturer
3	Tin	Environment-friendly unleaded	Lu Zhi Dao & Equal manufacturer
4	The packing way	Concave plastic belt pc	Ruifeng & Equal manufacturer
5	The packing way	Plastic disc	Ruifeng & Equal manufacturer
6			
7			
8			
9			
10			

Power Inductors
● Electrical characteristic

L: 4.7±20% AT 100 (KHz) 0,3 V ZX2816B LCR

DCR: 52 (mΩ)MAX AT 25°C CHEN HWA 502BCOHM METER

IDC: 3,9 (A)MAX AT 100 (KHz) 0,3 V CHUANG DA 1608+1310 LCZ

	Inductance &Tolerance (UH)	Test Freq (KHz)	Test Vol (V)	DC Resistance Max (mΩ)MAX	Rated DC Current (A)MAX
Testing Standards	4.7±20%	100	0,25	52	3,9 (≥90% Ls)
1	4,96	100	0,25	40,83	OK
2	4,93	100	0,25	42,87	OK
3	4,95	100	0,25	41,32	OK
4	4,94	100	0,25	41,63	OK
5	4,69	100	0,25	42,19	OK
6	4,89	100	0,25	41,88	OK
7	4,72	100	0,25	40,75	OK
8	4,89	100	0,25	41,05	OK
9	4,68	100	0,25	41,64	OK
10	4,79	100	0,25	40,22	OK
X	4,84			41,44	

Power Inductors

● Reliability Testing Items

No.	Items	Requirements	Test Methods and Remarks
1	Operating Temperature Range	$-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$	Including self-heating temperature rise.
2	Soldering Resistance	1.No visible mechanical damage 2.Inductance change:within $\pm 10\%$	Dip pads in flux and dip in solder pot (96.5sn/3.0Ag/0.5Cu) at $260 \pm 5^{\circ}\text{C}$ for 10 ± 1 seconds
3	Solderability	90%or more of electrode area shall be coated by new solder	Dip pads in flux and dip in solder pot (96.5sn/3.0Ag/0.5Cu) at $260 \pm 5^{\circ}\text{C}$ for 5 ± 1 seconds
4	Insulation Resistance	$\geq 100\text{M}\Omega$	100V DC between inductor coil and core for 60 seconds
5	Component Adhesion (Push test)	$\geq 2.0\text{kgf}$	Inductors shall be subjected to $260 \pm 5^{\circ}\text{C}$ for $20 \pm 5\text{sec}$ Soldering in the base with 0.3mm solder.And then apply electrode with 2.0kgf for ten seconds.
6	Over loading	1.There shall be no case deformation or change in appearance 2.The electrical characteristics of inductor to meet the requirements of spec.	Apply twice as rated current for five minutes between inductor terminals,direct current error $\pm 2\%$
7	Temperature change	1.There shall be no case deformation or change in appearance 2.Inductance shall not change more than $\pm 10\%$.	$+125^{\circ}\text{C}$ 1 hour $\leftrightarrow$ -40°C 1 hour 5 Cycles,Inductors are to be tested after 1 hour at room temperature
8	High temperature	1.There shall be no case deformation or change in appearance 2.Inductance shall not change more than $\pm 10\%$.	Inductors shall be subjected to $+105 \pm 5^{\circ}\text{C}$ for 96 ± 2 hour,Inductors are to be tested after one hour at room temperature
9	Low temperature	1.There shall be no case deformation or change in appearance 2.Inductance shall not change more than $\pm 10\%$.	Inductors shall be subjected to $-40 \pm 5^{\circ}\text{C}$ for 96 ± 2 hour,Inductors are to be tested after one hour at room temperature
10	Life	1.There shall be no case deformation or change in appearance 2.Inductance shall not change more than $\pm 10\%$.	Inductors shall be stored at $+105 \pm 5^{\circ}\text{C}$ for 1000 hours with rated current applied, Normal temperature test

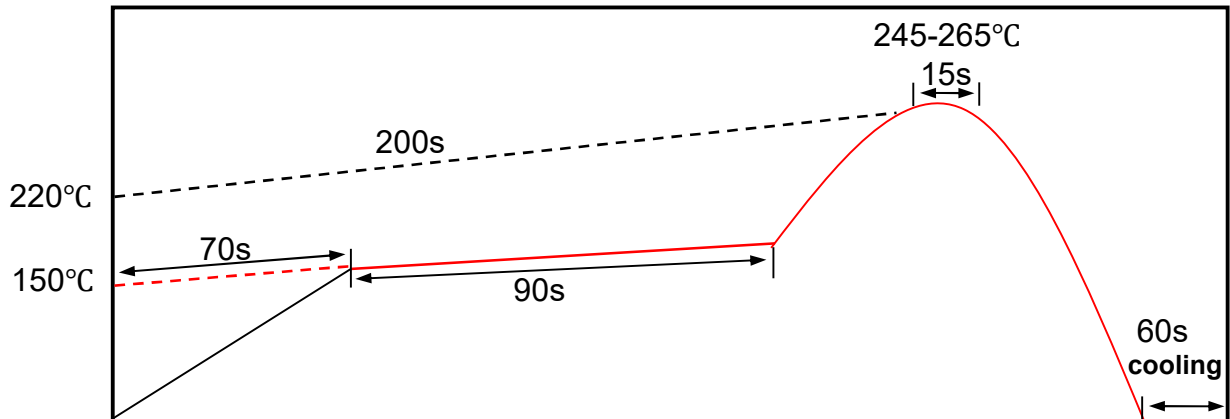
Power Inductors

● Recommend Soldering Conditions

Applicable soldering process to the products is reflow soldering.

Soldering Profile

(1) Reflow Soldering Profile



(2) Soldering Iron

Reworking with Soldering Iron must preheating at 150°C for 1 minute is required, and do not directly touch the core with the tip of the soldering iron. The reworking soldering conditions are as follows:

- ① Temperature of soldering iron tip: 350°C;
- ② Soldering iron power output: 30W max.
- ③ Diameter of soldering iron end: 1.0mm max.
- ④ Soldering time: within 3 sec.



● Storage Requirements

(1) Storage Period

To maintain the solderability of terminal electrodes and to keep the packing material in good condition, product should be used within 6 months from the time of delivery. And the solderability of products electrodes may decrease as time passes, so in case of storage over 6 months, solderability shall be checked before actual usage.

(2) Storage Conditions

- (1) Store products in a warehouse in compliance with the following condition:

Temperature: - 10 to +40°C Humidity: 30~70%RH

- (2) Do not subject products to rapid changes in temperature and humidity.
- (3) Do not store the products in chemical atmosphere such as one containing sulfurous acid gas or alkaline gas, that will causes poor solderability and corrosion of inductors.
- (4) Do not store products in bulk packaging to prevent collision among inductors which causes core wire breakage.chipping and
- (5) Store products on pallets to protect from humidity, dust, etc.
- (6) Avoid heat shock, vibration, direct sunlight, etc.