⊕ Feature

- •High current saturation.
- •Magnetically Shielded Structure.
- •Low profile construction and miniature size.

⊕ Applications

- •DC to DC converters.
- •Power line filtering.
- •DVC/DSC/PDA, LCD display.

⊕ Product Identification：

□□□ □□□□ □□ - □□□ □

1 2 3 4 5

Series name	Dimensions(LxWxH)		Internal code
ANR	201610	2.0*1.6*1.08mm	ZR = Trapezoid
	3015	3.0*3.0*1.5mm	ZE = Octagonal
	4020	4.0*4.0*2.0mm	ZS = Square

Inductance		Tolerance	
1R0	1 μH	K	10%
100	10 μH	M	20%
101	100 μH	N	30%

⊕ Shapes And Dimensions

Fig 1

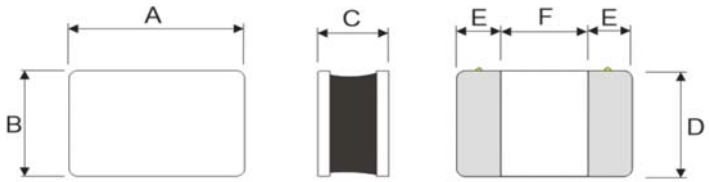
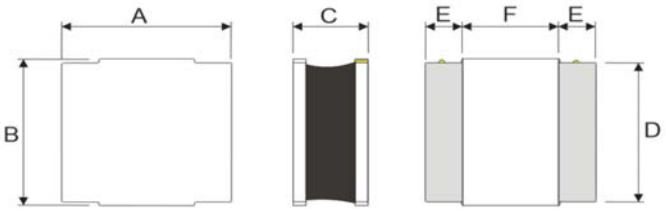


Fig 2



⊕Recommended PCB Pattern

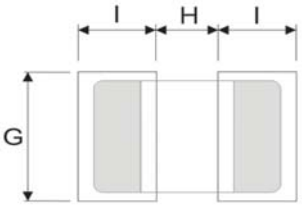
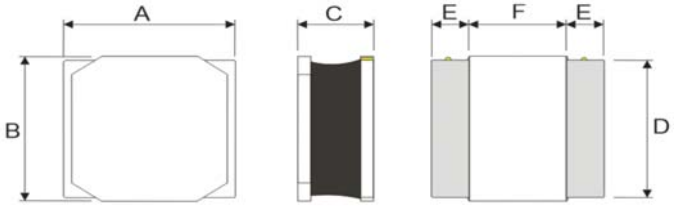
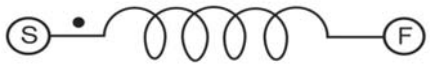


Fig 3



Part No.	Dimensions(mm)									Fig
	A	B	C	D	E	F	G	H	I	
ANR201610ZS	2.0±0.20	1.6±0.20	1.08 Max.	1.0±0.20	0.6±0.20	0.8±0.20	1.6 Ref	0.8 Ref	0.8 Ref	1
ANR252010ZS	2.5±0.20	2.0±0.20	1.05 Max.	1.5±0.20	0.8±0.20	0.8±0.20	2.0 Ref	0.8 Ref	0.85 Ref	1
ANR252012ZS	2.5±0.20	2.0±0.20	1.26 Max.	1.5±0.20	0.8±0.20	0.8±0.20	2.0 Ref	0.8 Ref	0.85 Ref	1
ANR3012ZR	3.0±0.20	3.0±0.20	1.2 Max.	2.5±0.20	0.75±0.20	1.5±0.20	2.7 Ref	1.5 Ref	0.8 Ref	2
ANR3015ZR	3.0±0.20	3.0±0.20	1.55 Max.	2.5±0.20	0.8 Ref	1.5 Ref	2.7 Ref	1.5 Ref	0.8 Ref	2
ANR3020ZE	3.0±0.20	3.0±0.20	2.2 Max.	2.5±0.20	0.8 Ref	1.5 Ref	2.7 Ref	1.5 Ref	0.8 Ref	3
ANR4012ZR	4.0±0.20	4.0±0.20	1.2 Max.	3.1±0.20	0.95±0.20	2.1 Ref	3.7 Ref	1.9 Ref	1.1 Ref	2
ANR4020ZR	4.0±0.20	4.0±0.20	2.0 Max.	3.1±0.20	0.95±0.20	2.1 Ref	3.7 Ref	1.9 Ref	1.1 Ref	2

⊕ Equivalent Circuit Schematic：



⊕ Material List：

No.	Location	Material
1	Core	Alloy Core
2	Wire	Grade1 P180
3	Solder	Sn99.3 Cu0.7
4	Epoxy	Magnetic powder resin

1.Operating temperature -40℃ ~ +125℃

2.Storage conditions -40℃ ~ +125℃

⊕ Electrical Characteristics :

Part No.	Inductance (μH)	Isat (A)		Irms (A)		DCR (mΩ)		Test Frequuency
		Max	Typ	Max	Typ	Max	Typ	
ANR201610ZS-R24M	0.24 ± 20%	4.50	5.00	3.00	3.45	40	33	100KHz/0.25V
ANR201610ZS-R33M	0.33 ± 20%	4.40	4.80	2.70	3.10	49	40	100KHz/0.25V
ANR201610ZS-R47M	0.47 ± 20%	4.06	4.50	2.70	3.10	49	41	100KHz/0.25V
ANR201610ZS-R56M	0.56 ± 20%	3.80	4.20	2.60	2.90	53	46	100KHz/0.25V
ANR201610ZS-R68M	0.68 ± 20%	3.50	4.00	2.50	2.80	65	57	100KHz/0.25V
ANR201610ZS-1R0M	1 ± 20%	3.30	3.50	2.00	2.30	95	82	100KHz/0.25V
ANR201610ZS-1R5M	1.5 ± 20%	1.95	2.20	1.70	2.00	130	115	100KHz/0.25V
ANR201610ZS-2R2M	2.2 ± 20%	1.90	2.10	1.40	1.60	180	165	100KHz/0.25V
ANR201610ZS-3R3M	3.3 ± 20%	1.40	1.60	1.10	1.30	307	280	100KHz/0.25V
ANR201610ZS-4R7M	4.7 ± 20%	1.10	1.20	0.90	1.10	425	394	100KHz/0.25V
ANR201610ZS-6R8M	6.8 ± 20%	0.95	1.10	0.70	0.90	620	588	100KHz/0.25V
ANR201610ZS-8R2M	8.2 ± 20%	0.86	1.00	0.66	0.75	870	800	100KHz/0.25V
ANR201610ZS-100M	10 ± 20%	0.80	0.90	0.60	0.65	875	820	100KHz/0.25V

⊕ Electrical Characteristics :

Part No.	Inductance (μH)	Isat (A)		Irms (A)		DCR (mΩ)		Test Frequuency
		Max	Typ	Max	Typ	Max	Typ	
ANR252010ZS-R24M	0.24 ± 20%	6.10	6.50	3.70	4.00	33	28	100KHz/0.25V
ANR252010ZS-R33M	0.33 ± 20%	4.80	5.20	3.50	3.80	39	30	100KHz/0.25V
ANR252010ZS-R47M	0.47 ± 20%	4.40	4.70	3.20	3.50	45	40	100KHz/0.25V
ANR252010ZS-R68M	0.68 ± 20%	3.20	3.60	2.75	3.00	59	49	100KHz/0.25V
ANR252010ZS-1R0M	1 ± 20%	3.10	3.50	2.50	2.50	85	76	100KHz/0.25V
ANR252010ZS-1R5M	1.5 ± 20%	2.60	2.80	2.00	2.30	106	90	100KHz/0.25V
ANR252010ZS-2R2M	2.2 ± 20%	1.90	2.10	1.50	1.80	155	135	100KHz/0.25V
ANR252010ZS-3R3M	3.3 ± 20%	1.60	1.80	1.20	1.40	235	196	100KHz/0.25V
ANR252010ZS-4R7M	4.7 ± 20%	1.30	1.50	1.00	1.20	290	282	100KHz/0.25V
ANR252010ZS-6R8M	6.8 ± 20%	1.00	1.20	0.95	1.00	480	460	100KHz/0.25V
ANR252010ZS-100M	10 ± 20%	0.90	1.00	0.65	0.75	740	710	100KHz/0.25V

⊕ Electrical Characteristics :

Part No.	Inductance (μH)	Isat (A)		Irms (A)		DCR (mΩ)		Test Frequuency
		Max	Typ	Max	Typ	Max	Typ	
ANR252012ZS-R24M	0.24 ± 20%	6.50	7.00	4.05	4.50	23	19	100KHz/0.25V
ANR252012ZS-R33M	0.33 ± 20%	5.35	6.00	3.50	3.70	28	23	100KHz/0.25V
ANR252012ZS-R47M	0.47 ± 20%	4.90	5.10	3.45	4.00	35	29	100KHz/0.25V
ANR252012ZS-R68M	0.68 ± 20%	3.80	4.00	3.15	3.60	45	39	100KHz/0.25V
ANR252012ZS-1R0M	1 ± 20%	3.60	3.80	3.00	3.40	54	48	100KHz/0.25V
ANR252012ZS-1R5M	1.5 ± 20%	2.90	3.10	2.40	2.80	72	60	100KHz/0.25V
ANR252012ZS-2R2M	2.2 ± 20%	2.60	2.80	1.90	2.15	120	100	100KHz/0.25V
ANR252012ZS-3R3M	3.3 ± 20%	1.70	1.80	1.50	1.90	215	170	100KHz/0.25V
ANR252012ZS-4R7M	4.7 ± 20%	1.60	1.70	1.25	1.45	260	225	100KHz/0.25V
ANR252012ZS-6R8M	6.8 ± 20%	1.20	1.30	0.95	1.10	366	305	100KHz/0.25V
ANR252012ZS-100M	10 ± 20%	1.10	1.20	0.85	0.95	480	435	100KHz/0.25V

⊕ Electrical Characteristics :

Part No.	Inductance (μH)	Isat (A)		Irms (A)		DCR (mΩ)		Test Frequuency
		Max	Typ	Max	Typ	Max	Typ	
ANR3012ZR-R33M	0.33 ± 20%	7.20	8.90	4.10	4.80	32	24	100KHz/0.25V

⊕ Electrical Characteristics :

Part No.	Inductance (μH)	Isat (A)		Irms (A)		DCR (mΩ)		Test Frequuency
		Max	Typ	Max	Typ	Max	Typ	
ANR3012ZR-R47M	0.47 ± 20%	6.80	8.00	3.80	4.20	40	31	100KHz/0.25V
ANR3012ZR-1R0M	1 ± 20%	4.20	5.40	2.70	3.10	54	46	100KHz/0.25V
ANR3012ZR-1R5M	1.5 ± 20%	3.40	4.10	2.50	2.90	74	62	100KHz/0.25V
ANR3012ZR-2R2M	2.2 ± 20%	2.80	3.35	2.05	2.35	108	90	100KHz/0.25V
ANR3012ZR-3R3M	3.3 ± 20%	2.20	2.60	1.50	1.80	185	144	100KHz/0.25V
ANR3012ZR-4R7M	4.7 ± 20%	2.00	2.50	1.15	1.35	255	215	100KHz/0.25V
ANR3012ZR-6R8M	6.8 ± 20%	1.60	1.90	1.10	1.25	340	290	100KHz/0.25V
ANR3012ZR-100M	10 ± 20%	1.20	1.45	1.00	1.15	474	395	100KHz/0.25V
ANR3012ZR-150M	15 ± 20%	1.10	1.20	0.53	0.60	740	620	100KHz/0.25V
ANR3012ZR-220M	22 ± 20%	0.96	1.00	0.40	0.50	1200	960	100KHz/0.25V

⊕ Electrical Characteristics :

Part No.	Inductance (μH)	Isat (A)		Irms (A)		DCR (mΩ)		Test Frequuency
		Max	Typ	Max	Typ	Max	Typ	
ANR3015ZR-R22M	0.22 ± 20%	8.80	9.20	5.00	6.00	19	15.4	100KHz/0.25V
ANR3015ZR-R24M	0.24 ± 20%	8.60	9.10	5.00	6.00	19	15.4	100KHz/0.25V
ANR3015ZR-R33M	0.33 ± 20%	8.00	8.50	4.90	5.80	21	16	100KHz/0.25V
ANR3015ZR-R47M	0.47 ± 20%	7.60	8.10	4.60	5.20	26	20	100KHz/0.25V
ANR3015ZR-R68M	0.68 ± 20%	7.00	7.50	4.00	4.60	37	28	100KHz/0.25V
ANR3015ZR-1R0M	1 ± 20%	5.80	6.30	3.50	4.00	48	37	100KHz/0.25V
ANR3015ZR-1R5M	1.5 ± 20%	4.60	5.10	2.20	2.70	72	55	100KHz/0.25V
ANR3015ZR-2R2M	2.2 ± 20%	3.70	4.20	2.10	2.60	95	74	100KHz/0.25V
ANR3015ZR-3R3M	3.3 ± 20%	3.40	3.90	2.00	2.50	150	110	100KHz/0.25V
ANR3015ZR-4R7M	4.7 ± 20%	2.50	3.00	1.70	2.00	185	150	100KHz/0.25V
ANR3015ZR-6R8M	6.8 ± 20%	2.00	2.40	1.20	1.35	320	250	100KHz/0.25V
ANR3015ZR-100M	10 ± 20%	1.60	2.00	1.10	1.30	450	350	100KHz/0.25V
ANR3015ZR-150M	15 ± 20%	1.45	1.65	1.10	1.30	610	500	100KHz/0.25V
ANR3015ZR-220M	22 ± 20%	1.00	1.30	0.56	0.80	910	740	100KHz/0.25V

⊕ Electrical Characteristics :

Part No.	Inductance (μH)	Isat (A)		Irms (A)		DCR (mΩ)		Test Frequuency
		Max	Typ	Max	Typ	Max	Typ	
ANR3020ZE-R22N	0.22 ± 30%	7.00	7.50	4.80	5.30	28	19	100KHz/0.25V
ANR3020ZE-R33N	0.33 ± 30%	6.80	7.30	4.60	5.10	30	22	100KHz/0.25V
ANR3020ZE-R47N	0.47 ± 30%	6.50	7.00	4.40	4.90	35	27	100KHz/0.25V
ANR3020ZE-2R2M	1 ± 20%	3.70	4.20	2.50	3.00	90	72	100KHz/0.25V
ANR3020ZE-3R3M	3.3 ± 20%	3.10	3.60	2.30	2.80	130	104	100KHz/0.25V
ANR3020ZE-100M	10 ± 20%	1.80	2.30	1.30	1.80	372	310	100KHz/0.25V
ANR3020ZE-150M	15 ± 20%	1.30	1.50	0.80	1.10	500	420	100KHz/0.25V
ANR3020ZE-220M	22 ± 20%	1.00	1.30	0.80	1.10	720	600	100KHz/0.25V

⊕ Electrical Characteristics :

Part No.	Inductance (μH)	Isat (A)		Irms (A)		DCR (mΩ)		Test Frequuency
		Max	Typ	Max	Typ	Max	Typ	
ANR4012ZR-R47M	0.47 ± 20%	7.20	7.40	3.80	4.00	41	34	100KHz/0.25V
ANR4012ZR-R56M	0.56 ± 20%	6.00	6.50	3.20	3.40	50	42	100KHz/0.25V
ANR4012ZR-R68M	0.68 ± 20%	5.20	5.50	3.25	3.50	60	46	100KHz/0.25V
ANR4012ZR-1R0M	1 ± 20%	3.80	4.00	3.00	3.20	65	50	100KHz/0.25V

⊕ Electrical Characteristics：

Part No.	Inductance (μH)	Isat (A)		Irms (A)		DCR (mΩ)		Test Frequuency
		Max	Typ	Max	Typ	Max	Typ	
ANR4012ZR-1R5M	1.5 ± 20%	3.80	4.00	2.80	3.00	75	62	100KHz/0.25V
ANR4012ZR-2R2M	2.2 ± 20%	2.80	3.00	2.50	2.70	90	75	100KHz/0.25V
ANR4012ZR-3R3M	3.3 ± 20%	2.80	3.00	2.00	2.20	132	110	100KHz/0.25V
ANR4012ZR-4R7M	4.7 ± 20%	2.30	2.50	1.80	2.00	175	146	100KHz/0.25V
ANR4012ZR-6R8M	6.8 ± 20%	1.60	1.80	1.50	1.70	230	190	100KHz/0.25V
ANR4012ZR-8R2M	8.2 ± 20%	1.58	1.70	1.46	1.60	273	230	100KHz/0.25V
ANR4012ZR-100M	10 ± 20%	1.55	1.65	0.85	0.95	360	300	100KHz/0.25V

⊕ Electrical Characteristics：

Part No.	Inductance (μH)	Isat (A)		Irms (A)		DCR (mΩ)		Test Frequuency
		Max	Typ	Max	Typ	Max	Typ	
ANR4020ZR-R24M	0.24 ± 20%	14.00	16.00	6.00	7.00	17	14	100KHz/0.25V
ANR4020ZR-R33M	0.33 ± 20%	13.00	14.00	5.90	6.80	20	16	100KHz/0.25V
ANR4020ZR-R47M	0.47 ± 20%	11.00	12.00	5.90	6.80	22	18	100KHz/0.25V
ANR4020ZR-R68M	0.68 ± 20%	9.00	10.00	5.80	6.70	25	20	100KHz/0.25V
ANR4020ZR-1R0M	1 ± 20%	8.70	9.50	5.70	6.50	28	23	100KHz/0.25V
ANR4020ZR-1R5M	1.5 ± 20%	7.70	8.00	5.20	6.00	38	33	100KHz/0.25V
ANR4020ZR-2R2M	2.2 ± 20%	6.00	6.30	4.00	4.50	56	46	100KHz/0.25V
ANR4020ZR-3R3M	3.3 ± 20%	4.70	4.90	3.40	3.80	88	73	100KHz/0.25V
ANR4020ZR-4R7M	4.7 ± 20%	4.00	4.20	2.85	3.00	115	95	100KHz/0.25V
ANR4020ZR-6R8M	6.8 ± 20%	3.00	3.10	2.40	2.80	160	140	100KHz/0.25V
ANR4020ZR-8R2M	8.2 ± 20%	2.90	3.00	2.10	2.40	220	180	100KHz/0.25V
ANR4020ZR-100M	10 ± 20%	2.80	2.90	2.00	2.20	220	190	100KHz/0.25V
ANR4020ZR-150M	15 ± 20%	2.10	2.20	1.00	1.30	400	320	100KHz/0.25V
ANR4020ZR-220M	22 ± 20%	1.30	1.40	0.95	1.00	545	510	100KHz/0.25V
ANR4020ZR-330M	33 ± 20%	1.20	1.30	0.70	0.75	850	810	100KHz/0.25V
ANR4020ZR-470M	47 ± 20%	1.10	1.20	0.56	0.60	1200	1100	100KHz/0.25V

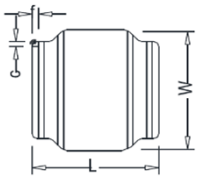
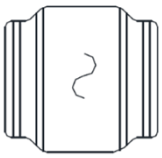
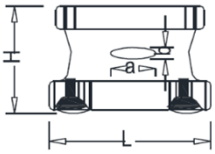
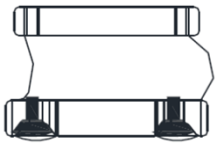
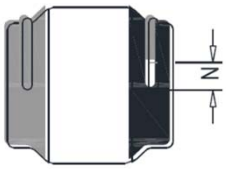
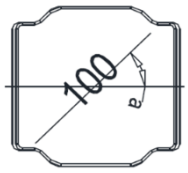
Note：Specifications which provide more details for the proper and safe use of the described product are available upon request. all specifications are subject to change without notice.

Isat：DC Saturation Current that will cause initial inductance to drop approximately 30% max.

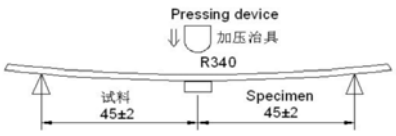
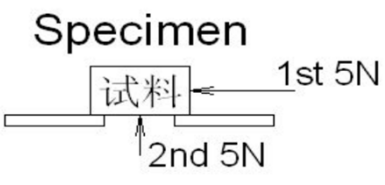
Irms：DC Current that will cause an approximate ΔT of 40 ℃

Test Instrument：LCR(CH1062/HP4284A)、DCR(TH2511/CH502BC)、IDC(CH1320) or equivalent.

⊕ Visual Inspection Standard of Product

No.	Defect Item	Figure	Rejection Identification	Acceptance
1	Core Defect		The defect length (c or f) more than L/6 or W/L, NG	AQL = 0.65
2	Core Crack		Visual cracks, NG	AQL = 0.65
3	Starvation		(1)Resin starved length a more than L/2, NG (2)When L>2mm, b>H/2,NG (3)When L≦2mm,b don't control.	AQL = 0.65
4	Excessive glue		The length, width or height of product beyond specified value, NG	AQL = 0.65
5	Cold Solder		(1)For SNR2520XX Series, Cold solder N>0.5mm, NG (2)For other series, cold solder N>1mm, NG	AQL = 0.65
6	Marking Defect		The marking angle α>45°,NG	AQL = 0.65

⊕ General Characteristics

項目 Item	Conditions	Specification
温度特性 Temperature drift	在温度-40 ~ + 125℃之间测试。 To be measured in the range of -40℃ to 125℃.	Inductance temperature coefficient 2000 ppm/℃ or less
保存温度范围 Storage Temperature	在包装的状态下。 With taping.	- 40℃ ~ + 125℃
使用温度范围 Operating Temperature	包括制品的发热温度。 Including self temperature rise.	- 40℃ ~ + 125℃
弯曲测试 Bending test	试件焊接在基板上，按箭头方向以大约0.5mm/秒的速度加压，直到基板变形幅度到3mm 保持30 秒。 Apply pressure gradually in the direction of the arrow at a rate of about 0.5mm/s until bent depth reaches 3mm and hold for 30±5s.  基板Board: 40*100mm 厚Thickness: 1.0mm	Change from an initial value L : within±10%
固着强度 Adhesion strength	按箭头方向用R0.5 的加压棒在试件中施加一定的静力并保持60±5秒. A static load using a R0.5 pressing tool shall be applied the arrow and to the body of the specimen in the direction of the arrow and shall be hold for 60±5s. Measure after removing pressure. 	Change from an initial value L : within±10%

耐振性 Vibration	振动频率10～55～10Hz, 振幅1.5mm, 分X,Y,Z 方向各振动1 小时（共3 小时）。 The specimen shall be subjected to a vibration of 1.5mm amplitude, sweep frequency 10~55Hz (10Hz to 55Hz to 10Hz in a period of one minute) for 1 h in each of 3(X,Y,Z) axes.	Change from an initial value L : within±10%
耐冲击性 Mechanical shock	利用橡胶块式落下冲击试验机，分别在3 个互相垂直的方向以981m/S2 的冲击加速度落下。 Peak acceleration: 981 m/S2 Duration of pulse: 6ms 3 times in each of 3(X,Y,Z)axes. The specimen must be fixed on test board. Three successive shock shall be applied in the perpendicular direction of each surface of the specimen.	Change from an initial value L : within±10%
自然落下试验 Free fall test	试件安装在基板上，并固定在重500 克的盒中，由1 米高自由落体，3 个互相垂直的方向各3 次。 The specimen must be fixed on test board. It must be equipped with instruments of which weight is 500g. Then it shall be fallen freely from 1m height to rigid wood 3 times in each of three axes.	Change from an initial value L : within±10%
焊锡付着性 Solder ability	试验品的电极深布松香后， 在5 ～ 10 秒内焊锡， 焊锡槽温度245±5℃，时间：3±0.5 秒。 Terminals shall be immersed for 5 to 10 seconds in flux at room temperature. Dip sample into solder bath containing molten solder at 245±5℃ for 3±0.5 seconds.	90%以上的面积要被覆盖。 New solder shall cover 90% minimum of the surface immersed.
耐电压 Dielectric strength	在电极与磁材之间加入直流电压100V 通电时间1 分钟。 100V DC shall be applied for 60s between the terminal and the core.	没有损害。 Without damage.

焊锡耐热性 Resistance to soldering heat	试验方法Test method 热风炉焊接Reflow soldering method 预热Preheat 150~180℃ 90±30s 峰值温度Peak temp 250(+ 5,-0)℃ (230℃min , 30±10s) 试验板的厚度0.8mm 上按上面条件通过两次热风炉。 The specimen shall be subjected to the reflow process under the above condition 2 times.Test board shall be 0.8mm thick. Base material shall be glass epoxy resin. 测定Measurement 常温常湿中放置于1 小时以上测试。 The specimen shall be stored at standard atmospheric conditions for 1 h in prior to the measurement.	Change from an initial value L : within±10%
绝缘抵抗 Insulation resistance	在电极与磁材之间加入直流电压100V。 100V DC shall be applied between the terminal and the core.	100mΩ 以上 100mΩ or more.
耐寒性 Low temperature	在温度-40±3℃中放置500±12 小时后，常温常湿中放置1 小时以上2 小时以内测试。 The specimen shall be stored at a temperature of -40 ±3℃ for 500 ±12h. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement Measurement shall be made within 1h.	Change from an initial value L : within±10%
耐热性 Dry heat	在温度125±2℃中放置500±12 小时后，常温常湿中放置1 小时以上2 小时以内测试。 The specimen shall be stored at a temperature of 125 ± 2℃ for 500± 12h. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.	Change from an initial value L : within±10%

耐湿性 Dump heat	在温度60±2℃，湿度90～95%中放置500±12 小时后，常温常湿中放置1 小时以上2 小时以内测试。 The specimen shall be stored at a temperature of 60± 2℃ with relative humidity of 90 ~ 95% for 500 ± 2h. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.	Change from an initial value L : within±10%
温度循环 Temperature cycle	以温度-40℃中放置30 分钟，在125℃放置30 分钟，中间转换时间不超过2 分钟为一个循环。完成500 个循环后，常温常湿中放置1小时以上2 小时以内测试。 The specimen shall be subjected to 500 continuous cycles of temperature change of -40℃ for 30 min and 125℃ for 30 min with the transit period of 2min or less. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.	Change from an initial value L : within±10%

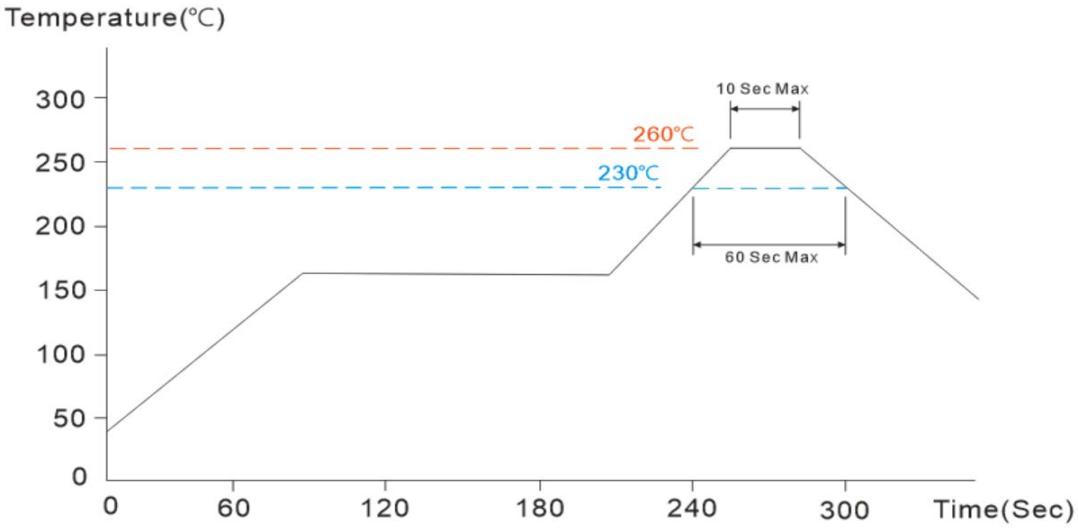
标准状态Standard atmospheric conditions

Unless otherwise specified, the standard range of atmospheric conditions in making measurements and test as follows;
Ambient temperature : 5℃ to 35℃, Relative humidity: 45% to 85%, Air pressure: 86kPa to 106kPa
If more strict measurement is required, measurement shall be made within following limits;
Ambient temperature : 20±2℃, Relative humidity: 65±5%, Air pressure: 86kPa to 106kPa

禁用物质Prohibited Subtances

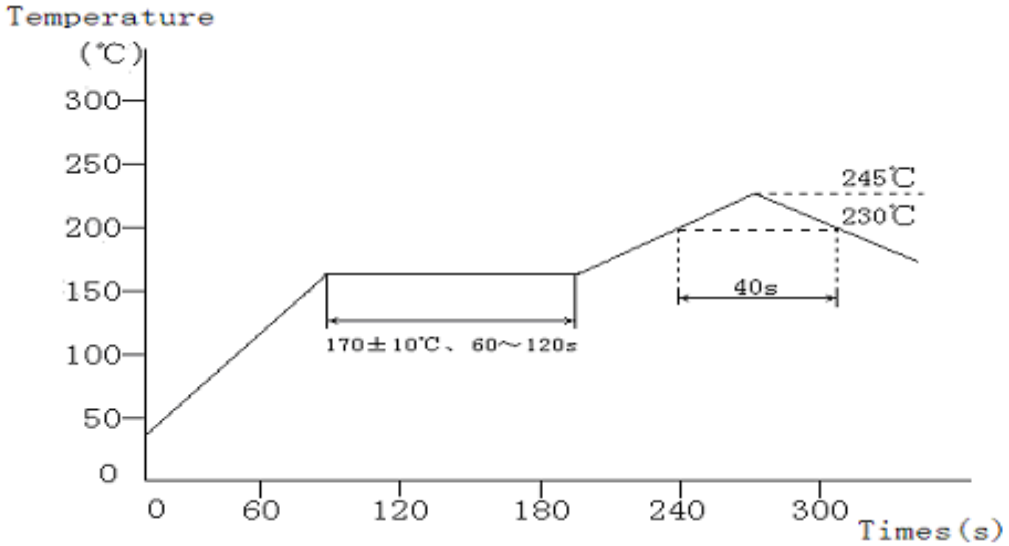
我公司保证我司的产品和生产过程符合“RoHS 规则”，所有产品中使用的材料均是化学物质生产规则中登记的材料。
We confirm that our products and our production process accord with "rule of RoHS". All materials used in this product are registered material under the law concerning the examination and Regulation of Manufacture of Chemical Substances.

⊕ Reflow Soldering Heat Endurance



No mechanical and electrical defects are found after testing based on the above profile and keeping under the conditions of room temperature and humidity for 2 hours.
Twice reflow test is acceptable with the test interval remaining 1 hour under the normal conditions.
The reflow test profile may vary with the testing instruments.

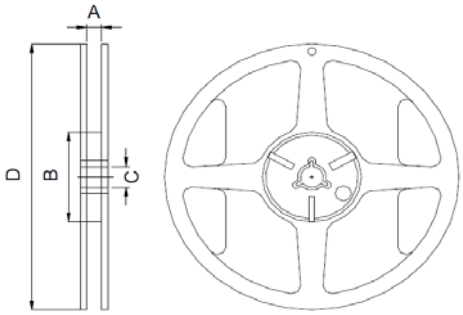
⊕ Recommended Reflow Conditions



The recommended reflow profile is based on the testing instruments used. Solder ability will depend on the testing equipments, reflow conditions, testing method, etc. So it is necessary to make a confirmation of them when the reflow conditions are set up.

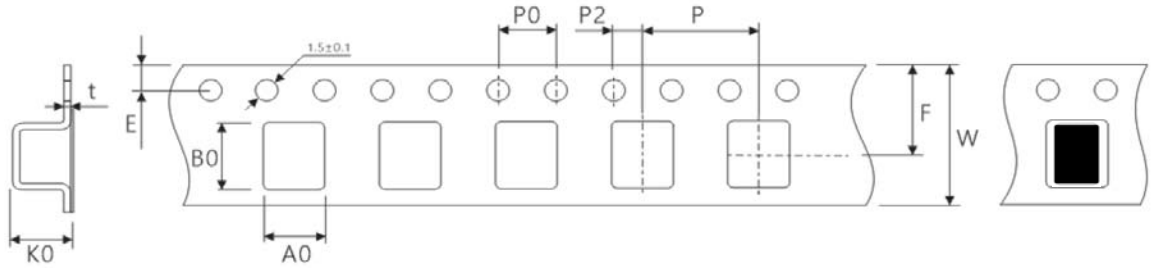
However halogen lamp shall be used, side heat will be beyond range of resistance heat,
so we can't recommend it.

⊕Reel Dimension(m/m)



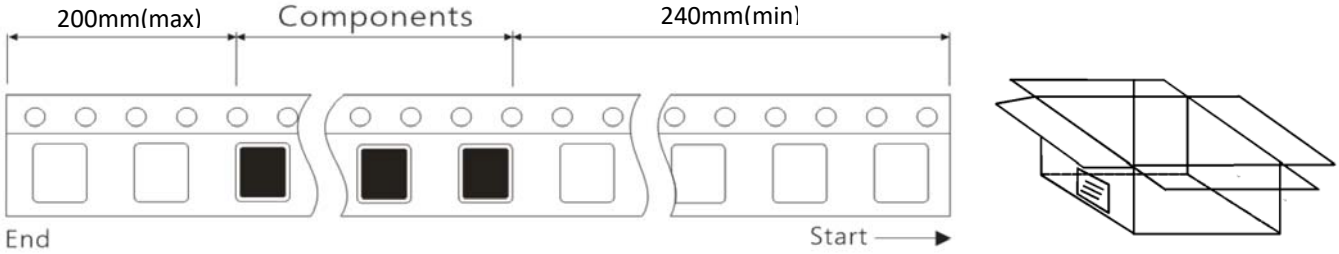
Item	A	B	C	D	Applicable Models
7"x8	8±1	60±1	13±1	178±1	ANR201610、ANR252010、ANR252012
7"x8	8±1	60±1	13±1	178±1	ANR3012、ANR3015、ANR3020
13"x12	12.4±1	100±1	13±1	330±1	ANR4012、ANR4020

⊕Taping Dimension(m/m)



Item	W	Ao	Bo	Ko	E	F	P	P0	P2	t
ANR201610	8±0.3	2±0.1	2.4±0.1	1.2±0.1	1.75±0.1	3.5±0.1	4±0.1	4.0±0.1	2.0±0.1	0.25±0.05
ANR252010	8±0.3	2.35±0.1	2.65±0.1	1.2±0.1	1.75±0.1	3.5±0.1	4±0.1	4.0±0.1	2.0±0.1	0.25±0.05
ANR252012	8±0.3	2.35±0.1	2.65±0.1	1.4±0.1	1.75±0.1	3.5±0.1	4±0.1	4.0±0.1	2.0±0.1	0.25±0.05
ANR3012	8±0.3	3.3±0.1	3.3±0.1	1.6±0.1	1.75±0.1	3.5±0.1	4±0.1	4.0±0.1	2.0±0.1	0.25±0.05
ANR3015	8±0.3	3.3±0.1	3.3±0.1	1.9±0.1	1.75±0.1	3.5±0.1	4±0.1	4.0±0.1	2.0±0.1	0.25±0.05
ANR3020	12±0.3	3.3±0.1	3.3±0.1	2.5±0.1	1.75±0.1	5.5±0.1	8±0.1	4.0±0.1	2.0±0.1	0.3±0.05
ANR4012	12±0.3	4.3±0.1	4.3±0.1	1.6±0.1	1.75±0.1	5.5±0.1	8±0.1	4.0±0.1	2.0±0.1	0.3±0.05
ANR4020	12±0.3	4.3±0.1	4.3±0.1	2.25±0.1	1.75±0.1	5.5±0.1	8±0.1	4.0±0.1	2.0±0.1	0.3±0.05

⊕Taping method



⊕ Packaging Carton

Reel Packing Unit	Inner Box Packing Unit	Carton Packing Unit	Applicable Models
2,000 PCS / Reel	20,000 PCS / Box	120,000 PCS / Box	ANR201610、ANR252010、ANR252012
2,000 PCS / Reel	20,000 PCS / Box	120,000 PCS / Box	ANR3012、ANR3015
1,000 PCS / Reel	10,000 PCS / Box	60,000 PCS / Box	ANR3020
4,500 PCS / Reel	13,500 PCS / Box	40,500 PCS / Box	ANR4012
3,000 PCS / Reel	12,000 PCS / Box	24,000 PCS / Box	ANR4020