

FEATURES 特征

- Metal material for large current and low loss.
大电流、低损耗用金属材料
- High performance (Isat) realized by metal dust core.
通过金属粉尘芯实现高性能 (Isat)
- Low loss realized with low Rdc.
通过低Rdc实现低损耗
- Closed magnetic circuit design reduces leakage flux.
闭合磁路屏蔽结构可减少漏磁通
- Vinyl thermal spray, better surface compactness.
乙烯基喷塑包覆, 表面致密性更好
- Operating Temp : -55℃~+125℃(Including self heating)
工作温度范围:-55℃~+125℃(包括自身温度上升)



APPLICATIONS 用途

- DC/DC converters, Pad, Smart phone, Notebooks, VR, AR.
DC/DC转换器, 平板电脑, 智能手机, 笔记本电脑、VR、AR
- Portable gaming devices, Smart wear, Wi-Fi module, LCD displays, HDDs, DVCs, DSCs, etc
便携式游戏设备, 智能穿戴, Wi-Fi模块, LCD显示器、HDD、DVC、DSC等
- Baseband power supply, Amplifier, Power management, Module power supply, Camera power Management.
基带电源、放大器、电源管理、模块电源、摄像机电源管理

PART NUMBERING 产品型号

APH	252012	C	2R2	M	P	01
①	②	③	④	⑤	⑥	⑦

① Series Name	
APH	Mini Molded SMD Power Inductors

③ Feature Type	
	C Type

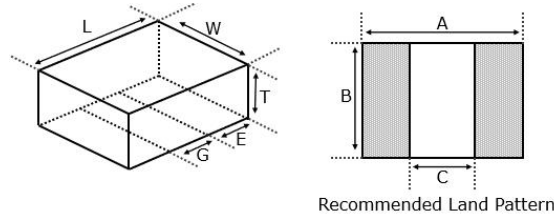
④ Inductance	
Code (example)	Nominal inductance [μH]
R47	0.47
1R0	1.0
100	10

⑤ Inductance Tolerance	
M	±20%

⑥ Coating Color Code	
P	Black
X	Gray

⑦ Design Code	
	01.02.03.--

② External Dimensions [LxWxT mm]			
100505	1.0x0.5x0.5	201610	2.0x1.6x1.0
100506	1.0x0.5x0.6	201612	2.0x1.6x1.2
100565	1.0x0.5x0.65	252055	2.5x2x0.55
100765	1.0x0.7x0.65	252075	2.5x2x0.75
100708	1.0x0.7x0.8	252008	2.5x2x0.8
121065	1.2x1.0x0.65	252010	2.5x2x1.0
141265	1.4x1.2x0.65	252012	2.5x2x1.2
141207	1.4x1.2x0.7	303010	3.0x3.0x1.0
141208	1.4x1.2x0.8	303012	3.0x3.0x1.2
160806	1.6x0.8x0.6	303015	3.0x3.0x1.5
160865	1.6x0.8x0.65	303018	3.0x3.0x1.8
160808	1.6x0.8x0.8	303020	3.0x3.0x2.0
201206	2.0x1.2x0.6	322510	3.2x2.5x1.0
201265	2.0x1.2x0.65	322512	3.2x2.5x1.2
201208	2.0x1.2x0.8	322520	3.2x2.5x2.0
201210	2.0x1.2x1.0	404008	4.1x4.1x0.8
201212	2.0x1.2x1.2	404010	4.1x4.1x1.0
201655	2.0x1.6x0.55	404012	4.1x4.1x1.2
201606	2.0x1.6x0.6	404015	4.1x4.1x1.5
201665	2.0x1.6x0.65	404020	4.1x4.1x2.0
201607	2.0x1.6x0.7	404030	4.1x4.1x3.0
201608	2.0x1.6x0.8		

DIMENSIONS & RECOMMENDED LAND PATTERN 尺寸及推荐焊盘


Unit: mm

Dimensions						Recommended Land Pattern		
Series	L	W	T	G	E	A	B	C
			Max.	Typ.	±0.2	Typ.	Typ.	Typ.
APH100505	1.0±0.15	0.5±0.15	0.50	0.40	0.30	1.20	0.60	0.30
APH100506	1.0±0.15	0.5±0.15	0.60	0.40	0.30	1.20	0.60	0.30
APH100565	1.0±0.15	0.5±0.15	0.65	0.40	0.30	1.20	0.60	0.30
APH100765	1.0±0.1	0.7±0.1	0.65	0.40	0.30	1.10	0.80	0.30
APH100708	1.0±0.1	0.7±0.1	0.80	0.40	0.30	1.10	0.80	0.30
APH121065	1.2±0.2	1.0±0.2	0.65	0.40	0.40	1.30	1.10	0.30
APH141265	1.4±0.2	1.2±0.2	0.65	0.50	0.45	1.50	1.30	0.40
APH141207	1.4±0.2	1.2±0.2	0.70	0.50	0.45	1.50	1.30	0.40
APH141208	1.4±0.2	1.2±0.2	0.80	0.50	0.45	1.50	1.30	0.40
APH160806	1.6±0.2	0.8±0.2	0.60	0.60	0.50	1.70	0.90	0.50
APH160865	1.6±0.2	0.8±0.2	0.65	0.60	0.50	1.70	0.90	0.50
APH160808	1.6±0.2	0.8±0.2	0.80	0.60	0.50	1.70	0.90	0.50
APH201206	2.0±0.2	1.2±0.2	0.60	0.60	0.70	2.10	1.30	0.50
APH201265	2.0±0.2	1.2±0.2	0.65	0.60	0.70	2.10	1.30	0.50
APH201208	2.0±0.2	1.2±0.2	0.80	0.60	0.70	2.10	1.30	0.50
APH201210	2.0±0.2	1.2±0.2	1.00	0.60	0.70	2.10	1.30	0.50
APH201212	2.0±0.2	1.2±0.2	1.20	0.60	0.70	2.10	1.30	0.50
APH201655	2.0±0.2	1.6±0.2	0.55	0.60	0.70	2.10	1.70	0.50
APH201606	2.0±0.2	1.6±0.2	0.60	0.60	0.70	2.10	1.70	0.50
APH201665	2.0±0.2	1.6±0.2	0.65	0.60	0.70	2.10	1.70	0.50
APH201607	2.0±0.2	1.6±0.2	0.70	0.60	0.70	2.10	1.70	0.50
APH201608	2.0±0.2	1.6±0.2	0.80	0.60	0.70	2.10	1.70	0.50
APH201610	2.0±0.2	1.6±0.2	1.00	0.60	0.70	2.10	1.70	0.50
APH201612	2.0±0.2	1.6±0.2	1.20	0.60	0.70	2.10	1.70	0.50
APH252055	2.5±0.2	2.0±0.2	0.55	0.80	0.85	2.60	2.10	0.70
APH252075	2.5±0.2	2.0±0.2	0.75	0.80	0.85	2.60	2.10	0.70
APH252008	2.5±0.2	2.0±0.2	0.80	0.80	0.85	2.60	2.10	0.70
APH252010	2.5±0.2	2.0±0.2	1.00	0.80	0.85	2.60	2.10	0.70
APH252012	2.5±0.2	2.0±0.2	1.20	0.80	0.85	2.60	2.10	0.70
APH303010	3.0±0.1	3.0±0.1	1.00	1.00	1.00	3.00	3.00	0.90
APH303012	3.0±0.1	3.0±0.1	1.20	1.00	1.00	3.00	3.00	0.90
APH303015	3.0±0.1	3.0±0.1	1.50	1.00	1.00	3.00	3.00	0.90
APH303018	3.0±0.1	3.0±0.1	1.80	1.00	1.00	3.00	3.00	0.90
APH303020	3.0±0.1	3.0±0.1	2.00	1.00	1.00	3.00	3.00	0.90
APH322510	3.2±0.2	2.5±0.2	1.00	1.10	1.05	3.20	2.50	1.00
APH322512	3.2±0.2	2.5±0.2	1.20	1.10	1.05	3.20	2.50	1.00
APH322520	3.2±0.2	2.5±0.2	2.00	1.10	1.05	3.20	2.50	1.00
APH404008	4.1±0.2	4.1±0.2	0.80	1.40	1.35	4.10	4.10	1.30
APH404010	4.1±0.2	4.1±0.2	1.00	1.40	1.35	4.10	4.10	1.30
APH404012	4.1±0.2	4.1±0.2	1.20	1.40	1.35	4.10	4.10	1.30
APH404015	4.1±0.2	4.1±0.2	1.50	1.40	1.35	4.10	4.10	1.30
APH404020	4.1±0.2	4.1±0.2	2.00	1.40	1.35	4.10	4.10	1.30
APH404030	4.1±0.2	4.1±0.2	3.00	1.40	1.35	4.10	4.10	1.30

ELECTRICAL CHARACTERISTICS 特性规格表

● APH100505 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH100505CR47MP01	0.47	±20%	220	190	1.30	1.50	1.20	1.30

● APH100506 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH100506C1R0MP01	1	±20%	320	280	1.05	1.15	0.80	1.00
APH100506C1R0MP02	1	±20%	300	270	1.05	1.15	0.80	1.00

● APH100565 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH100565CR47MP01	0.47	±20%	175	150	1.75	1.85	1.60	1.70

● APH100765 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH100765C1R5MP03	1.5	±20%	500	400	0.90	1.10	0.30	0.40
APH100765C2R6MX03	2.6	±20%	900	750	0.80	1.00	0.40	0.55

● APH100708 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH100708C2R2MP03	2.2	±20%	480	425	1.05	1.15	0.90	1.00

ELECTRICAL CHARACTERISTICS 特性规格表

● APH121065 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH121065C2R2MP01	2.2	±20%	340	280	1.20	1.30	0.90	1.00

● APH141265 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH141265CR10MP01	0.1	±20%	16.5	13.5	6.50	7.00	6.00	6.50
APH141265CR15MP01	0.15	±20%	19.5	16	5.50	6.00	5.40	5.90
APH141265CR24MP01	0.24	±20%	27	23	5.00	5.50	6.00	6.50
APH141265CR33MP01	0.33	±20%	32	26	4.00	4.40	4.20	4.40
APH141265CR33MX01	0.33	±20%	32	26	4.00	4.40	4.20	4.40
APH141265CR47MP01	0.47	±20%	45	37	3.00	3.40	2.70	3.00
APH141265CR47MX01	0.47	±20%	45	37	3.00	3.40	2.70	3.00
APH141265CR47MX03	0.47	±20%	38	35	3.60	4.00	3.20	3.50

● APH141207 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH141207CR24MP01	0.24	±20%	28	22	4.30	4.60	3.60	4.00
APH141207CR47MP01	0.47	±20%	38	34	3.50	3.80	3.30	3.80

● APH141208 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH141208CR10MP01	0.1	±20%	14	11.5	8.00	8.50	7.50	8.00
APH141208CR24MP01	0.24	±20%	27	22	5.70	6.00	3.70	4.10
APH141208CR24MP02	0.24	±20%	24	21	6.50	7.20	6.00	6.60
APH141208CR33MP01	0.33	±20%	28	23	5.00	5.30	3.50	4.00
APH141208CR33MX01	0.33	±20%	28	23	5.00	5.30	3.50	4.00
APH141208CR47MP01	0.47	±20%	35	29	4.20	4.60	3.30	3.80
APH141208CR47MX01	0.47	±20%	35	29	4.20	4.60	3.30	3.80

ELECTRICAL CHARACTERISTICS 特性规格表

● APH141208 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH141208CR47MP02	0.47	±20%	32	29	4.20	4.60	3.30	3.80
APH141208CR68MP01	0.68	±20%	57	51	3.20	3.50	3.00	3.50
APH141208C1R0MP01	1	±20%	77	65	2.50	3.00	2.50	3.00
APH141208C2R2MP01	2.2	±20%	225	200	1.70	1.90	1.80	2.00
APH141208C3R3MP01	3.3	±20%	345	300	1.40	1.60	1.30	1.50
APH141208C4R7MP01	4.7	±20%	530	465	1.20	1.30	1.00	1.10

● APH160806 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH160806CR10MX01	0.1	±20%	20	16.5	6.00	6.50	6.00	6.50

● APH160865 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH160865CR22MX01	0.22	±20%	43	35	4.50	5.00	3.50	4.00
APH160865CR47MX01	0.47	±20%	82	66	3.00	3.30	2.00	2.30
APH160865CR47MX02	0.47	±20%	78	65	3.20	3.50	2.50	3.00
APH160865C1R0MX01	1	±20%	200	180	2.00	2.40	1.50	1.80
APH160865C1R0MX02	1	±20%	160	140	2.00	2.20	1.80	2.20
APH160865C2R2MP01	2.2	±20%	430	390	1.30	1.60	1.10	1.30

● APH160808 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH160808CR18MP01	0.18	±20%	21	17	5.50	6.00	5.20	5.80
APH160808CR22MP01	0.22	±20%	40	33	5.00	5.50	3.00	3.40
APH160808CR24MP01	0.24	±20%	41	34	4.80	5.30	2.90	3.30
APH160808CR24MP02	0.24	±20%	26	22	4.40	4.90	3.50	3.90
APH160808CR24MP03	0.24	±20%	24	20	4.80	5.30	5.00	5.50

ELECTRICAL CHARACTERISTICS 特性规格表

● APH160808 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH160808CR33MP01	0.33	±20%	35	30	4.40	4.70	4.30	4.70
APH160808CR47MP01	0.47	±20%	100	80	3.70	4.10	2.30	2.60
APH160808CR47MP02	0.47	±20%	43	36	3.50	4.00	4.00	4.20
APH160808CR56MP01	0.56	±20%	110	85	3.50	4.00	1.90	2.20
APH160808CR56MP02	0.56	±20%	63	51	2.70	3.00	2.20	2.50
APH160808CR68MP01	0.68	±20%	130	110	3.00	3.30	1.90	2.10
APH160808C1R0MP01	1	±20%	200	180	2.60	3.00	1.80	2.10
APH160808C1R0MX02	1	±20%	115	105	2.10	2.30	1.80	2.10
APH160808C1R0MX03	1	±20%	115	105	2.20	2.50	1.80	2.10
APH160808C1R5MP01	1.5	±20%	285	240	2.00	2.40	1.40	1.70
APH160808C2R2MP01	2.2	±20%	260	220	1.30	1.50	1.20	1.40
APH160808C2R2MX01	2.2	±20%	260	220	1.30	1.50	1.20	1.40
APH160808C3R3MP01	3.3	±20%	600	500	1.20	1.40	0.90	1.00
APH160808C4R7MP01	4.7	±20%	700	585	1.00	1.20	0.80	1.00
APH160808C100MP01	10	±20%	1600	1450	0.70	0.80	0.45	0.50

● APH201206 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201206CR11MX01	0.11	±20%	15	12.5	4.80	5.20	7.00	7.50
APH201206CR47MP01	0.47	±20%	47	39	3.20	3.50	3.10	3.40

● APH201265 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201265CR15MP01	0.15	±20%	14	12	6.00	6.50	5.50	6.00
APH201265CR24MP01	0.24	±20%	20	17	4.80	5.10	4.50	4.80
APH201265CR33MP01	0.33	±20%	35	30	4.30	4.60	4.00	4.30
APH201265CR47MP01	0.47	±20%	44	37	3.80	4.10	3.50	3.80
APH201265CR47MP03	0.47	±20%	44	37	4.00	4.20	3.50	3.80
APH201265CR68MP01	0.68	±20%	60	50	3.20	3.50	3.00	3.30
APH201265C1R0MP01	1	±20%	86	78	2.50	2.80	2.30	2.60

ELECTRICAL CHARACTERISTICS 特性规格表

● APH201265 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201265C1R5MP01	1.5	±20%	135	115	2.00	2.30	1.80	2.10
APH201265C2R2MP01	2.2	±20%	230	215	1.50	1.80	1.40	1.70
APH201265C2R2MP02	2.2	±20%	210	175	1.30	1.40	1.30	1.40
APH201265C2R2MP03	2.2	±20%	200	175	1.60	1.90	1.50	1.80
APH201265C4R7MP01	4.7	±20%	530	470	1.00	1.20	0.90	1.10

● APH201208 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201208CR11MP01	0.11	±20%	12	10	9.00	9.50	6.50	7.00
APH201208CR15MP01	0.15	±20%	13	11	7.00	7.50	6.30	6.80
APH201208CR24MP01	0.24	±20%	23	18	6.00	6.50	5.90	6.50
APH201208CR24MX01	0.24	±20%	23	18	6.00	6.50	5.90	6.50
APH201208CR24MX03	0.24	±20%	20	17	6.60	7.00	5.90	6.50
APH201208CR24MP03	0.24	±20%	18	16	7.00	7.20	6.50	7.00
APH201208CR33MP01	0.33	±20%	45	33	4.80	5.20	4.00	4.30
APH201208CR33MP02	0.33	±20%	24	20	5.40	6.00	5.20	5.80
APH201208CR47MP01	0.47	±20%	50	34	4.60	5.00	3.30	3.50
APH201208CR47MX01	0.47	±20%	50	34	4.60	5.00	3.30	3.50
APH201208CR47MP02	0.47	±20%	28	24	4.80	5.20	4.50	4.70
APH201208CR68MP01	0.68	±20%	60	50	3.70	4.20	3.30	3.70
APH201208C1R0MP01	1	±20%	70	55	3.50	4.00	2.90	3.30
APH201208C1R0MP02	1	±20%	55	48	2.80	3.20	2.80	3.20
APH201208C1R0MX02	1	±20%	55	48	2.80	3.20	2.80	3.20
APH201208C1R5MP01	1.5	±20%	135	118	2.50	3.00	1.90	2.20
APH201208C2R2MP01	2.2	±20%	185	160	2.30	2.60	1.80	2.20
APH201208C2R2MP03	2.2	±20%	156	130	2.00	2.20	1.60	1.80
APH201208C3R3MP01	3.3	±20%	300	253	1.60	1.90	1.50	1.80
APH201208C4R7MP01	4.7	±20%	325	285	1.40	1.60	1.50	1.70
APH201208C6R8MP01	6.8	±20%	530	460	1.10	1.30	1.00	1.10
APH201208C100MP01	10	±20%	800	700	0.80	0.90	0.70	0.80

ELECTRICAL CHARACTERISTICS 特性规格表

● APH201210 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201210CR10MP01	0.1	±20%	13	8	8.00	8.50	7.00	7.50
APH201210CR11MP01	0.11	±20%	8.5	7	12.00	14.10	9.50	10.00
APH201210CR22MP01	0.22	±20%	22	16	6.80	7.30	6.50	7.10
APH201210CR24MP01	0.24	±20%	23	17	6.70	7.20	6.40	7.00
APH201210CR24MX02	0.24	±20%	17	13	6.70	7.20	6.40	7.00
APH201210CR24MX03	0.24	±20%	14	11.5	6.70	7.30	8.00	9.00
APH201210CR33MP01	0.33	±20%	32	24	6.00	6.50	5.00	5.50
APH201210CR33MX03	0.33	±20%	16	14	6.30	6.70	5.20	5.70
APH201210CR47MP01	0.47	±20%	36	29	5.00	5.50	4.30	4.70
APH201210CR47MX03	0.47	±20%	26	22	5.50	6.00	4.50	5.00
APH201210CR47MP02	0.47	±20%	20	18	5.50	6.00	6.50	7.00
APH201210CR56MP01	0.56	±20%	31	26	4.80	5.20	4.70	5.30
APH201210CR68MP01	0.68	±20%	43	37	4.50	5.00	4.00	4.30
APH201210C1R0MP01	1	±20%	63	55	3.50	4.00	3.50	3.90
APH201210C1R0MP02	1	±20%	55	50	3.50	4.00	3.50	4.00
APH201210C1R0MP03	1	±20%	55	50	3.60	4.00	3.50	4.00
APH201210C1R2MP01	1.2	±20%	75	65	3.00	3.30	2.90	3.20
APH201210C1R5MP01	1.5	±20%	85	76	2.70	3.20	2.60	3.10
APH201210C2R2MP01	2.2	±20%	150	135	2.40	2.70	1.70	2.00
APH201210C2R2MP02	2.2	±20%	145	125	2.40	2.70	2.00	2.20
APH201210C3R3MP01	3.3	±20%	260	210	1.80	2.20	1.50	1.80
APH201210C4R7MP01	4.7	±20%	300	275	1.60	1.80	1.40	1.60
APH201210C6R8MP01	6.8	±20%	520	440	1.20	1.45	1.30	1.50
APH201210C100MP01	10	±20%	660	600	1.00	1.20	1.00	1.10

● APH201212 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201212CR11MP01	0.11	±20%	6.2	5.5	11.00	12.00	11.00	12.00
APH201212CR11MP02	0.11	±20%	5.8	5	11.00	12.00	11.00	12.00
APH201212CR24MP01	0.24	±20%	16	13	8.50	9.00	7.00	7.50
APH201212CR24MP02	0.24	±20%	15	13	8.50	9.00	7.20	7.70
APH201212CR33MP01	0.33	±20%	20.5	17	6.00	6.50	5.80	6.30
APH201212CR47MP01	0.47	±20%	23.5	20	5.00	5.50	5.50	6.00
APH201212CR47MP02	0.47	±20%	22	20	5.00	5.50	5.70	6.20

ELECTRICAL CHARACTERISTICS 特性规格表

● APH201212 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201212C1R0MP01	1	±20%	48	40	3.60	4.00	3.50	3.90
APH201212C1R5MP01	1.5	±20%	80	70	3.00	3.30	2.70	3.00
APH201212C2R2MP01	2.2	±20%	130	115	2.40	2.80	2.30	2.50
APH201212C3R3MP01	3.3	±20%	210	180	1.80	2.00	1.60	1.80
APH201212C100MP01	10	±20%	500	440	1.20	1.40	1.10	1.20

● APH201655 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201655CR33MP01	0.33	±20%	41	34	3.50	4.00	3.50	4.00
APH201655CR47MP01	0.47	±20%	53	44	3.00	3.50	3.00	3.50

● APH201606 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201606C2R2MP01	2.2	±20%	180	155	1.70	1.90	1.60	1.80
APH201606C4R7MP01	4.7	±20%	425	370	1.20	1.40	1.10	1.30

● APH201665 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201665CR47MP01	0.47	±20%	40	33	4.00	4.40	4.50	5.00
APH201665CR68MP01	0.68	±20%	50	42	3.10	3.40	3.50	4.00
APH201665C1R0MP01	1	±20%	70	58	2.70	3.00	3.00	3.50
APH201665C2R2MP01	2.2	±20%	170	145	2.00	2.20	2.60	2.80

ELECTRICAL CHARACTERISTICS 特性规格表

● APH201607 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201607C2R2MP01	2.2	±20%	175	150	2.00	2.30	1.80	2.10

● APH201608 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201608CR22MP01	0.22	±20%	19	14	5.60	6.10	5.90	6.60
APH201608CR24MP01	0.24	±20%	20	14	5.50	6.00	5.80	6.50
APH201608CR33MP01	0.33	±20%	24	18	5.30	5.80	4.80	5.50
APH201608CR47MP01	0.47	±20%	27	24	5.00	5.50	5.20	5.50
APH201608CR47MX01	0.47	±20%	27	24	5.00	5.50	5.20	5.50
APH201608CR68MP01	0.68	±20%	44	39	4.20	4.60	3.50	3.80
APH201608C1R0MP01	1	±20%	60	53	3.10	3.30	3.30	3.60
APH201608C1R0MX02	1	±20%	52	45	3.50	3.80	3.30	3.60
APH201608C1R5MP01	1.5	±20%	85	73	2.80	3.00	2.80	3.10
APH201608C2R2MP03	2.2	±20%	180	150	2.20	2.40	2.10	2.30
APH201608C2R2MP01	2.2	±20%	140	123	2.30	2.50	2.00	2.20
APH201608C3R3MP01	3.3	±20%	220	200	1.80	2.10	1.50	1.80
APH201608C4R7MP01	4.7	±20%	290	260	1.50	1.70	1.40	1.60
APH201608C4R7MP03	4.7	±20%	325	270	1.30	1.50	1.20	1.40
APH201608C6R8MP01	6.8	±20%	405	360	1.30	1.40	1.20	1.40
APH201608C100MP03	10	±20%	900	800	0.80	0.90	0.90	1.00
APH201608C100MP01	10	±20%	800	690	0.90	1.00	0.90	1.00

● APH201610 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201610CR10MP01	0.1	±20%	12	7	8.40	9.00	8.00	8.50
APH201610CR11MP01	0.11	±20%	13	7.5	8.20	8.90	7.50	8.00
APH201610CR15MP01	0.15	±20%	14	8	8.00	8.70	7.00	7.60
APH201610CR22MP01	0.22	±20%	18	11	7.50	8.20	6.30	6.90
APH201610CR22MP02	0.22	±20%	13	11	7.50	8.20	6.30	6.90
APH201610CR24MP01	0.24	±20%	19	12	7.40	8.00	6.20	6.80

ELECTRICAL CHARACTERISTICS 特性规格表
● APH201610 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201610CR24MP02	0.24	±20%	14	11	7.40	8.00	6.20	6.80
APH201610CR24MP03	0.24	±20%	9	7.5	7.00	7.50	7.50	8.00
APH201610CR33MP01	0.33	±20%	22	17	6.50	7.00	5.30	5.70
APH201610CR33MX01	0.33	±20%	22	17	6.50	7.00	5.30	5.70
APH201610CR33MP03	0.33	±20%	13	11	6.00	6.50	6.20	6.70
APH201610CR33MP13	0.33	±20%	22	17	7.00	7.50	5.30	5.70
APH201610CR47MP01	0.47	±20%	25	22	5.50	6.30	5.00	5.50
APH201610CR47MP03	0.47	±20%	25	22	6.00	6.50	5.60	5.80
APH201610CR47MX01	0.47	±20%	25	22	5.50	6.30	5.00	5.50
APH201610CR47MX02	0.47	±20%	22	18	5.60	6.20	5.60	6.00
APH201610CR47MP13	0.47	±20%	23	19	6.50	7.00	6.00	6.50
APH201610CR47MP12	0.47	±20%	17	14	5.00	5.50	6.00	6.50
APH201610CR56MP01	0.56	±20%	23	19	5.00	5.50	7.00	7.50
APH201610CR68MP01	0.68	±20%	32	25	4.70	5.20	4.30	4.60
APH201610CR68MP03	0.68	±20%	32	25	5.50	5.70	5.20	5.50
APH201610C1R0MP01	1	±20%	43	35	4.20	4.60	4.10	4.50
APH201610C1R0MX01	1	±20%	43	35	4.20	4.60	4.10	4.50
APH201610C1R0MP02	1	±20%	36	31	4.20	4.80	4.30	4.80
APH201610C1R0MX02	1	±20%	36	31	4.20	4.80	4.30	4.80
APH201610C1R0MP03	1	±20%	46	42	4.60	4.90	3.40	4.00
APH201610C1R5MP01	1.5	±20%	100	80	2.90	3.20	2.30	2.60
APH201610C1R5MP02	1.5	±20%	70	60	3.00	3.30	3.50	4.00
APH201610C2R2MP01	2.2	±20%	130	120	2.80	3.00	2.10	2.50
APH201610C2R2MX01	2.2	±20%	130	120	2.80	3.00	2.10	2.50
APH201610C2R2MX02	2.2	±20%	115	105	2.80	3.00	2.10	2.50
APH201610C2R2MP13	2.2	±20%	81	72	2.80	3.00	3.00	3.30
APH201610C2R2MP03	2.2	±20%	125	115	3.00	3.30	2.20	2.50
APH201610C3R3MP01	3.3	±20%	170	140	2.00	2.30	1.50	1.70
APH201610C4R7MP03	4.7	±20%	276	250	1.70	1.90	1.40	1.60
APH201610C4R7MP01	4.7	±20%	220	190	1.80	2.00	1.40	1.60
APH201610C4R7MX01	4.7	±20%	220	190	1.80	2.00	1.40	1.60
APH201610C6R8MP01	6.8	±20%	350	320	1.50	1.70	1.50	1.70
APH201610C100MP01	10	±20%	580	483	1.10	1.40	0.70	1.00
APH201610C150MP01	15	±20%	960	800	0.90	1.10	0.60	0.90
APH201610C220MP01	22	±20%	1400	1200	0.70	0.80	0.50	0.60

ELECTRICAL CHARACTERISTICS 特性规格表

● APH201612 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH201612CR10MP01	0.1	±20%	6	4	11.50	13.00	10.00	12.00
APH201612CR11MP01	0.11	±20%	5.6	4.8	11.00	12.50	14.50	15.50
APH201612CR11MP03	0.11	±20%	7.5	6.3	14.00	15.00	12.00	13.00
APH201612CR15MP01	0.15	±20%	10	7.5	10.50	12.00	9.00	10.00
APH201612CR22MP01	0.22	±20%	10.5	8.5	9.20	9.70	8.80	9.30
APH201612CR24MP01	0.24	±20%	11	9	8.70	9.20	8.60	9.10
APH201612CR24MP03	0.24	±20%	12.5	10	10.00	10.50	10.00	11.00
APH201612CR33MP01	0.33	±20%	15	10	7.30	7.80	7.20	7.70
APH201612CR47MP01	0.47	±20%	17	13	6.00	6.70	6.00	6.70
APH201612CR68MP01	0.68	±20%	23	19	5.30	6.00	5.30	6.00
APH201612CR68MP03	0.68	±20%	25	22	5.50	6.00	5.40	6.00
APH201612C1R0MP01	1	±20%	36	30	4.50	5.00	4.50	5.00
APH201612C1R5MP01	1.5	±20%	50	40	3.50	4.00	3.50	4.00
APH201612C2R2MP01	2.2	±20%	90	77	2.70	3.10	2.90	3.30
APH201612C3R3MP01	3.3	±20%	165	135	2.30	2.70	2.00	2.40
APH201612C3R3MP02	3.3	±20%	130	115	2.30	2.70	2.20	2.60
APH201612C4R7MP01	4.7	±20%	185	160	2.00	2.20	1.80	2.00
APH201612C6R8MP01	6.8	±20%	300	255	1.70	1.90	1.70	1.80
APH201612C100MP01	10	±20%	460	410	1.30	1.40	1.20	1.30

● APH252055 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH252055CR22MP01	0.22	±20%	28	23	4.50	4.80	6.00	6.50
APH252055CR47MP01	0.47	±20%	49	42	3.20	3.50	5.20	5.50

● APH252075 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH252075C2R2MX01	2.2	±20%	90	78	2.40	2.60	2.00	2.30

ELECTRICAL CHARACTERISTICS 特性规格表

● APH252008 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH252008CR47MP01	0.47	±20%	27	22	5.30	6.00	6.00	6.50
APH252008CR68MP01	0.68	±20%	32	27	4.50	5.00	4.40	4.90
APH252008C1R0MP01	1	±20%	40	34	4.00	4.50	4.00	4.30
APH252008C1R5MP01	1.5	±20%	75	64	3.00	3.50	3.00	3.40
APH252008C2R2MP01	2.2	±20%	77	69	2.60	3.00	2.60	3.00
APH252008C3R3MP01	3.3	±20%	180	150	2.10	2.50	2.10	2.50
APH252008C4R7MP01	4.7	±20%	215	180	1.50	1.90	1.50	2.00
APH252008C4R7MP02	4.7	±20%	180	160	1.50	1.90	1.50	2.00
APH252008C6R8MP02	6.8	±20%	300	260	1.20	1.40	1.10	1.30
APH252008C100MP01	10	±20%	600	500	0.90	1.10	1.20	1.40
APH252008C100MP02	10	±20%	540	490	1.10	1.30	1.30	1.40

● APH252010 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH252010CR10MP01	0.1	±20%	8.5	6.5	12.50	13.50	11.00	12.00
APH252010CR15MP01	0.15	±20%	9	7	9.50	10.50	8.50	9.50
APH252010CR22MP01	0.22	±20%	17	12	7.90	8.60	6.50	6.80
APH252010CR22MX01	0.22	±20%	17	12	7.90	8.60	6.50	6.80
APH252010CR24MP01	0.24	±20%	17.5	12	7.80	8.50	6.40	6.70
APH252010CR24MP02	0.24	±20%	10	8.5	8.00	9.00	7.50	8.50
APH252010CR33MP01	0.33	±20%	19	13	7.20	7.60	6.20	6.50
APH252010CR33MX01	0.33	±20%	19	13	7.20	7.60	6.20	6.50
APH252010CR47MP01	0.47	±20%	22	15	6.50	7.20	5.60	6.10
APH252010CR47MX01	0.47	±20%	22	15	6.50	7.20	5.60	6.10
APH252010CR47MP02	0.47	±20%	15	13	6.00	6.60	6.00	6.50
APH252010CR68MP01	0.68	±20%	27	23	5.50	5.90	5.00	5.60
APH252010CR82MP01	0.82	±20%	29	25	4.80	5.30	4.10	4.50
APH252010C1R0MP01	1	±20%	30	25	4.80	5.40	4.10	4.70
APH252010C1R0MX01	1	±20%	30	25	4.80	5.40	4.10	4.70
APH252010C1R0MP02	1	±20%	28	25	4.50	5.00	4.40	4.90
APH252010C1R5MP01	1.5	±20%	55	45	3.90	4.30	3.00	3.40
APH252010C1R5MX01	1.5	±20%	55	45	3.90	4.30	3.00	3.40
APH252010C1R8MP01	1.8	±20%	60	50	3.50	4.00	3.50	4.00

ELECTRICAL CHARACTERISTICS 特性规格表

● APH252010 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH252010C2R2MP01	2.2	±20%	70	62	3.00	3.30	2.10	2.40
APH252010C2R2MX01	2.2	±20%	70	62	3.00	3.30	2.10	2.40
APH252010C2R2MP03	2.2	±20%	70	62	3.30	3.70	2.30	2.60
APH252010C2R2MP02	2.2	±20%	70	62	3.10	3.40	3.20	4.00
APH252010C3R3MP01	3.3	±20%	100	86	2.50	2.80	2.10	2.50
APH252010C3R3MX01	3.3	±20%	100	86	2.50	2.80	2.10	2.50
APH252010C4R7MP01	4.7	±20%	180	160	2.00	2.60	1.60	2.00
APH252010C4R7MX01	4.7	±20%	180	160	2.00	2.60	1.60	2.00
APH252010C4R7MP02	4.7	±20%	160	145	2.00	2.60	1.60	2.00
APH252010C4R7MP03	4.7	±20%	130	120	2.00	2.20	2.80	3.00
APH252010C6R8MP01	6.8	±20%	320	270	1.90	2.40	1.40	1.60
APH252010C100MP01	10	±20%	560	500	1.40	1.55	0.95	1.05
APH252010C100MX01	10	±20%	560	500	1.40	1.55	0.95	1.05
APH252010C220MP01	22	±20%	1300	1100	0.90	1.10	0.60	0.85
APH252010C220MX01	22	±20%	1300	1100	0.90	1.10	0.60	0.85

● APH252012 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH252012CR10MP01	0.1	±20%	10	6	12.50	13.50	10.50	12.00
APH252012CR10MP02	0.1	±20%	4.8	4	14.00	15.00	15.00	16.00
APH252012CR11MP01	0.11	±20%	5	4.2	13.00	14.00	14.00	15.00
APH252012CR15MP01	0.15	±20%	11	7	12.00	13.00	10.00	11.50
APH252012CR15MP02	0.15	±20%	7	5.7	12.00	13.00	10.00	11.50
APH252012CR22MP01	0.22	±20%	14	9	9.00	9.60	7.60	8.20
APH252012CR22MP02	0.22	±20%	10	8	10.00	12.00	8.00	11.00
APH252012CR22MP03	0.22	±20%	8	6	10.00	11.00	9.00	9.50
APH252012CR24MP01	0.24	±20%	15	10	8.80	9.30	7.50	8.00
APH252012CR24MX01	0.24	±20%	15	10	8.80	9.30	7.50	8.00
APH252012CR24MP03	0.24	±20%	10	8.7	10.00	11.00	7.50	8.00
APH252012CR24MP02	0.24	±20%	8.5	6.5	9.50	10.00	9.00	9.50
APH252012CR33MP01	0.33	±20%	17	11	7.80	8.30	6.40	6.80
APH252012CR33MP02	0.33	±20%	12	10	8.50	9.00	8.50	9.00
APH252012CR33MP03	0.33	±20%	9.5	7.5	8.50	9.00	8.50	9.00
APH252012CR47MP01	0.47	±20%	19	13	7.00	7.50	6.00	6.50

ELECTRICAL CHARACTERISTICS 特性规格表
● APH252012 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH252012CR47MP02	0.47	±20%	13	11	8.00	8.50	7.50	8.00
APH252012CR47MX02	0.47	±20%	13	11	8.00	8.50	7.50	8.00
APH252012CR56MP01	0.56	±20%	19	16	6.60	7.10	6.00	6.50
APH252012CR68MP01	0.68	±20%	23	17	6.00	6.50	5.50	6.30
APH252012CR68MP02	0.68	±20%	18	15	6.00	6.70	7.00	7.50
APH252012CR82MP01	0.82	±20%	24	19	5.80	6.50	5.30	5.80
APH252012CR82MP02	0.82	±20%	23	19	5.80	6.50	5.80	6.30
APH252012C1R0MP01	1	±20%	42	35	5.00	5.60	4.80	5.30
APH252012C1R0MP02	1	±20%	22	16	6.00	6.50	5.60	6.10
APH252012C1R0MX02	1	±20%	22	16	6.00	6.50	5.60	6.10
APH252012C1R0MP03	1	±20%	36	30	5.00	5.60	5.00	5.50
APH252012C1R2MP01	1.2	±20%	45	40	4.10	4.50	3.40	3.80
APH252012C1R2MP02	1.2	±20%	35	29	4.80	5.30	5.20	5.70
APH252012C1R5MP01	1.5	±20%	50	44	4.10	4.50	3.20	3.70
APH252012C1R5MP13	1.5	±20%	53	46	4.70	5.20	4.20	4.60
APH252012C1R5MX01	1.5	±20%	50	44	4.10	4.50	3.20	3.70
APH252012C1R5MP03	1.5	±20%	35	31	4.20	4.50	4.10	4.50
APH252012C1R5MP02	1.5	±20%	32	27	4.40	4.70	4.20	4.60
APH252012C2R2MP01	2.2	±20%	65	55	3.30	3.80	2.70	3.00
APH252012C2R2MP02	2.2	±20%	60	52	3.70	4.10	3.50	3.90
APH252012C2R2MX01	2.2	±20%	65	55	3.30	3.80	2.70	3.00
APH252012C3R3MP01	3.3	±20%	97	80	2.70	3.00	2.50	2.80
APH252012C4R7MP01	4.7	±20%	170	150	2.10	2.40	1.90	2.20
APH252012C4R7MX01	4.7	±20%	170	150	2.10	2.40	1.90	2.20
APH252012C4R7MP03	4.7	±20%	170	150	2.50	2.70	2.20	2.40
APH252012C6R8MP01	6.8	±20%	270	245	1.70	2.00	1.60	1.80
APH252012C6R8MP03	6.8	±20%	270	245	2.10	2.20	2.00	2.10
APH252012C100MP01	10	±20%	400	330	1.45	1.60	1.05	1.20
APH252012C100MX01	10	±20%	400	330	1.45	1.60	1.05	1.20
APH252012C150MP01	15	±20%	565	500	1.30	1.40	1.30	1.40
APH252012C220MP01	22	±20%	800	740	1.00	1.10	1.10	1.20

ELECTRICAL CHARACTERISTICS 特性规格表

APH303010 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH303010C1R0MP03	1	±20%	35	30	4.80	5.30	6.50	7.00
APH303010C1R0MP02	1	±20%	30	25	5.60	6.00	6.50	7.00
APH303010C2R2MP03	2.2	±20%	66	55	3.50	4.00	4.50	5.00
APH303010C3R3MP03	3.3	±20%	102	86	2.80	3.10	3.00	3.40
APH303010C4R7MP03	4.7	±20%	140	120	2.30	2.70	2.80	3.20
APH303010C6R8MP03	6.8	±20%	270	225	1.50	1.80	1.80	2.10
APH303010C100MP01	10	±20%	360	320	1.30	1.60	1.70	2.00
APH303010C100MP02	10	±20%	275	250	1.50	1.80	2.00	2.20

APH303012 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH303012CR10MP03	0.1	±20%	6	5	18.00	20.00	17.00	18.00
APH303012CR33MP03	0.33	±20%	10.5	8.5	10.00	11.00	9.00	10.00
APH303012CR47MP03	0.47	±20%	11	9	8.00	8.50	10.00	11.00
APH303012CR68MP03	0.68	±20%	16	14	6.50	7.00	7.00	7.50
APH303012C1R0MP03	1	±20%	27	23	5.50	6.00	5.00	5.50
APH303012C1R5MP03	1.5	±20%	34	29	5.00	5.50	5.50	6.00
APH303012C2R2MP03	2.2	±20%	50	42	4.50	5.00	4.30	4.80
APH303012C2R2MP13	2.2	±20%	75	63	5.60	6.10	3.60	4.00
APH303012C3R3MP03	3.3	±20%	85	72	3.50	4.00	3.30	3.80
APH303012C4R7MP03	4.7	±20%	120	100	2.50	3.00	2.50	3.00
APH303012C100MP03	10	±20%	220	192	2.00	2.30	1.90	2.30
APH303012C150MP03	15	±20%	380	345	1.60	1.90	1.30	1.60

APH303015 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH303015CR15MP03	0.15	±20%	6	5	15.00	16.00	11.00	12.00
APH303015CR20MP03	0.2	±20%	5.9	4.8	15.00	16.00	12.00	13.00
APH303015CR22MP03	0.22	±20%	6	5	14.00	16.00	13.00	15.00
APH303015CR33MP03	0.33	±20%	8.5	6.5	11.00	12.00	13.00	14.00

ELECTRICAL CHARACTERISTICS 特性规格表

● APH303015 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH303015CR47MP03	0.47	±20%	11	9	9.00	10.00	8.00	9.00
APH303015CR68MP03	0.68	±20%	13.5	11	8.00	8.50	7.00	7.50
APH303015C1R0MP03	1	±20%	22	18	6.50	7.00	5.50	6.00
APH303015C1R5MP03	1.5	±20%	26	22	5.50	6.00	7.50	8.00
APH303015C2R2MP03	2.2	±20%	50	42	4.50	5.00	4.00	4.50
APH303015C3R3MP03	3.3	±20%	68	58	4.00	4.50	3.50	4.00
APH303015C4R7MP03	4.7	±20%	104	87	3.50	4.00	3.00	3.50
APH303015C6R8MP03	6.8	±20%	180	160	3.00	3.50	2.00	2.50
APH303015C100MP03	10	±20%	215	185	2.50	2.80	1.50	2.00
APH303015C220MP03	22	±20%	700	580	1.20	1.60	1.00	1.20

● APH303018 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH303018CR22MP03	0.22	±20%	7	5.5	16.00	17.00	9.00	10.00
APH303018CR47MP03	0.47	±20%	10	8	11.00	12.00	8.00	9.00
APH303018CR68MP03	0.68	±20%	14.5	12	10.00	11.00	9.00	10.00
APH303018C1R0MP03	1	±20%	21	15	6.80	7.60	5.80	6.30
APH303018C1R5MP03	1.5	±20%	26	20	7.00	8.00	6.40	6.80
APH303018C4R7MP03	4.7	±20%	87	72	4.20	4.70	3.00	3.40

● APH303020 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH303020CR10MP03	0.1	±20%	4.5	3.3	23.00	25.00	16.00	17.00
APH303020CR15MP03	0.15	±20%	5	4	17.00	18.00	12.00	13.00
APH303020CR22MP03	0.22	±20%	6.5	5	16.00	17.50	10.00	11.00
APH303020CR33MP03	0.33	±20%	9	7.5	15.00	17.00	9.00	10.00
APH303020CR36MP03	0.36	±20%	9	7.5	14.50	16.50	9.00	10.00
APH303020CR47MP03	0.47	±20%	11	8	13.50	15.00	8.00	9.00
APH303020CR50MP03	0.5	±20%	12	9	13.00	15.00	8.00	9.00
APH303020CR50MP02	0.5	±20%	8.3	7	12.00	13.50	11.50	12.50

ELECTRICAL CHARACTERISTICS 特性规格表

● APH303020 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH303020CR68MP03	0.68	±20%	16	13	11.00	13.00	7.80	8.50
APH303020C1R0MP03	1	±20%	20	14	7.30	8.00	6.00	6.50
APH303020C1R2MP03	1.2	±20%	21	16	7.00	7.50	6.50	7.00
APH303020C1R5MP03	1.5	±20%	25	19	6.50	7.00	5.80	6.30
APH303020C2R2MP03	2.2	±20%	45	37	5.50	6.00	4.30	4.70
APH303020C3R3MP03	3.3	±20%	63	52	5.40	5.90	4.00	4.50
APH303020C4R7MP03	4.7	±20%	73	60	4.00	4.80	3.80	4.20
APH303020C6R8MP03	6.8	±20%	135	107	3.80	4.50	3.00	3.20
APH303020C100MP03	10	±20%	160	135	3.30	3.80	2.20	2.50
APH303020C150MP03	15	±20%	260	235	2.20	2.60	1.50	1.80

● APH322510 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH322510CR22MP01	0.22	±20%	11	9	8.00	8.50	8.00	8.50
APH322510CR33MP01	0.33	±20%	15	11	7.80	8.30	7.80	8.30
APH322510CR47MP01	0.47	±20%	22	17	7.60	8.30	5.90	6.40
APH322510CR68MP01	0.68	±20%	28	22	7.00	7.50	5.70	6.20
APH322510C1R0MP01	1	±20%	30	25	5.30	6.00	4.90	5.40
APH322510C1R0MP02	1	±20%	25	21	5.10	5.60	5.00	5.50
APH322510C1R5MP01	1.5	±20%	42	34	4.40	5.00	3.60	4.00
APH322510C2R2MP01	2.2	±20%	66	55	3.50	4.00	3.40	3.70
APH322510C3R3MP01	3.3	±20%	120	105	3.30	3.70	2.30	2.70
APH322510C4R7MP01	4.7	±20%	140	125	2.50	2.80	1.90	2.30
APH322510C6R8MP01	6.8	±20%	320	290	2.00	2.40	1.60	1.90
APH322510C100MP01	10	±20%	365	325	1.80	2.20	1.80	2.20

● APH322512 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH322512CR10MP01	0.1	±20%	7	5.2	16.50	18.00	11.00	12.00
APH322512CR11MP01	0.11	±20%	6	4.5	15.50	17.00	12.00	13.00

ELECTRICAL CHARACTERISTICS 特性规格表

● APH322512 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH322512CR11MP03	0.11	±20%	7	5.5	18.00	18.50	11.00	12.00
APH322512CR22MP01	0.22	±20%	10	6.6	11.00	11.50	8.70	9.20
APH322512CR22MX01	0.22	±20%	10	6.6	11.00	11.50	8.70	9.2
APH322512CR22MP02	0.22	±20%	8	6.2	11.00	12.00	10.00	11.00
APH322512CR24MP01	0.24	±20%	12	7	10.50	11.00	8.50	9.00
APH322512CR33MP01	0.33	±20%	14	9	9.50	10.00	8.10	8.40
APH322512CR47MP01	0.47	±20%	19	14	8.20	8.60	7.20	7.50
APH322512CR47MX01	0.47	±20%	19	14	8.20	8.60	7.20	7.50
APH322512CR47MP02	0.47	±20%	14	11	8.20	8.60	7.20	7.50
APH322512CR47MP03	0.47	±20%	11	10	8.00	8.50	8.00	8.50
APH322512CR56MP01	0.56	±20%	19	15	8.00	8.40	7.50	8.00
APH322512CR68MP01	0.68	±20%	23	18	7.70	8.10	6.80	7.30
APH322512CR68MP02	0.68	±20%	15	12	7.50	8.00	6.50	7.00
APH322512C1R0MP01	1	±20%	30	26	5.80	6.60	4.80	5.30
APH322512C1R0MX01	1	±20%	30	26	5.80	6.60	4.80	5.30
APH322512C1R0MP02	1	±20%	21	18	7.00	7.70	6.00	6.50
APH322512C1R0MP03	1	±20%	32	26	8.00	8.30	5.50	6.00
APH322512C1R2MP01	1.2	±20%	32	26	5.40	5.90	5.20	5.70
APH322512C1R5MP01	1.5	±20%	44	37	4.70	5.10	4.30	4.70
APH322512C2R2MP01	2.2	±20%	70	58	4.20	4.60	3.00	3.60
APH322512C2R2MP02	2.2	±20%	50	42	4.50	5.00	3.70	4.20
APH322512C2R2MX02	2.2	±20%	50	42	4.50	5.00	3.70	4.20
APH322512C3R3MP01	3.3	±20%	95	75	3.20	3.70	2.50	2.90
APH322512C3R3MX01	3.3	±20%	95	75	3.20	3.70	2.50	2.90
APH322512C3R3MX02	3.3	±20%	67	62	3.20	3.70	2.50	2.90
APH322512C4R7MP01	4.7	±20%	135	115	2.60	2.90	2.80	3.00
APH322512C4R7MP03	4.7	±20%	120	105	2.60	3.00	2.80	3.00
APH322512C4R7MP13	4.7	±20%	135	115	2.80	3.20	2.80	3.00
APH322512C4R7MP02	4.7	±20%	115	105	2.70	3.00	2.60	3.00
APH322512C6R8MP01	6.8	±20%	210	177	2.40	2.80	1.90	2.10
APH322512C100MP01	10	±20%	230	210	1.90	2.30	1.80	2.20

ELECTRICAL CHARACTERISTICS 特性规格表

● APH322520 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH322520C70NMP01	0.07	±20%	3.2	2.5	24.00	25.00	20.00	22.00
APH322520CR10MP01	0.1	±20%	4	3	20.50	21.50	15.00	16.00
APH322520CR22MP01	0.22	±20%	6	5	15.50	16.50	11.00	12.00
APH322520CR27MP01	0.27	±20%	6.5	5.5	15.00	16.00	15.00	16.00
APH322520CR33MP01	0.33	±20%	9	7.5	14.00	15.50	9.00	9.50
APH322520CR47MP01	0.47	±20%	10.5	9	13.00	15.00	8.50	9.50
APH322520CR68MP01	0.68	±20%	14.5	12.5	11.00	13.00	8.00	9.00
APH322520C1R0MP01	1	±20%	17.5	15	8.30	9.00	7.50	8.20
APH322520C1R0MP03	1	±20%	17.5	15	10.00	10.50	8.00	8.50
APH322520C1R5MP01	1.5	±20%	25	22	6.00	6.80	6.00	6.50
APH322520C2R2MP01	2.2	±20%	43	36	5.50	6.50	4.80	5.40
APH322520C2R2MP02	2.2	±20%	40	33	5.50	6.50	4.80	5.40
APH322520C3R3MP01	3.3	±20%	60	55	3.50	4.50	4.00	4.50
APH322520C4R7MP01	4.7	±20%	94	81	3.00	4.00	3.00	3.50
APH322520C6R8MP01	6.8	±20%	125	101	2.90	3.80	2.30	2.80
APH322520C100MP01	10	±20%	200	170	2.40	2.60	1.60	1.80
APH322520C150MP01	15	±20%	260	220	2.00	2.20	1.80	2.00
APH322520C220MP01	22	±20%	364	315	1.70	2.00	1.50	1.80

● APH404008 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH404008C100MP01	10	±20%	455	400	1.60	1.90	1.50	1.80
APH404008C100MP02	10	±20%	428	364	1.60	1.90	1.50	1.80

● APH404010 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH404010C1R0MP01	1	±20%	26	22	4.80	5.30	6.50	7.00
APH404010C4R7MP01	4.7	±20%	140	120	3.50	3.80	3.00	3.40
APH404010C100MP01	10	±20%	280	220	2.00	2.20	2.00	2.50

ELECTRICAL CHARACTERISTICS 特性规格表

● APH404012 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH404012CR47MP01	0.47	±20%	14	11.5	11.50	12.00	8.50	9.00
APH404012CR60MP01	0.6	±20%	14.5	12	8.50	9.00	8.00	8.50
APH404012CR68MP01	0.68	±20%	18	15	9.00	10.00	7.50	8.50
APH404012C1R0MP01	1	±20%	25	21	10.00	11.00	5.50	6.30
APH404012C1R0MP02	1	±20%	23	20	8.00	9.00	5.30	6.20
APH404012C1R5MP01	1.5	±20%	34.5	29	7.00	8.00	5.00	6.00
APH404012C2R2MP01	2.2	±20%	55	45	6.00	6.50	4.50	5.00
APH404012C3R3MP01	3.3	±20%	80	67	5.00	5.50	4.00	4.50
APH404012C4R7MP01	4.7	±20%	110	90	4.50	5.00	3.00	3.50
APH404012C5R6MP01	5.6	±20%	140	116	4.00	4.50	2.50	3.00
APH404012C6R8MP01	6.8	±20%	160	132	3.50	3.80	2.30	2.80
APH404012C100MP01	10	±20%	235	200	2.50	2.80	2.00	2.50
APH404012C220MP01	22	±20%	480	420	1.50	1.80	1.20	1.50

● APH404015 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH404015C4R7MP01	4.7	±20%	63	53	5.00	5.50	4.50	5.00
APH404015C5R6MP01	5.6	±20%	80	66	4.30	4.80	4.00	4.50

● APH404020 Series

Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH404020CR33MP01	0.33	±20%	6	5	17.00	18.00	8.50	9.50
APH404020CR47MX01	0.47	±20%	8.5	7	15.00	16.00	8.00	8.50
APH404020C1R0MX01	1	±20%	14.5	12	11.50	12.50	6.00	6.50
APH404020C1R5MX01	1.5	±20%	22	18	9.50	10.50	5.50	6.00
APH404020C2R2MX01	2.2	±20%	36	30	8.50	9.50	5.00	5.50
APH404020C2R2MX02	2.2	±20%	28	24	7.50	8.50	6.00	7.00
APH404020C3R3MX01	3.3	±20%	40	35	7.00	8.00	5.80	6.30
APH404020C4R7MX01	4.7	±20%	58	47	5.50	6.30	4.00	5.00
APH404020C6R8MX01	6.8	±20%	105	90	4.50	5.40	3.20	3.70

ELECTRICAL CHARACTERISTICS 特性规格表

● APH404020 Series

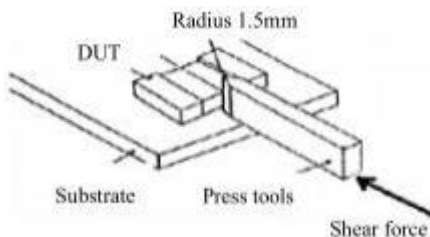
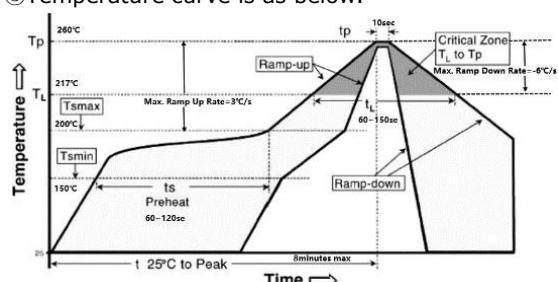
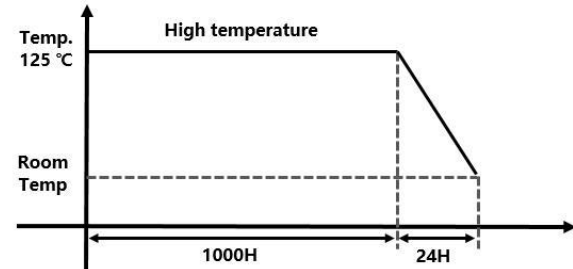
Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH404020C100MX01	10	±20%	135	113	4.00	4.90	3.00	3.40
APH404020C150MX01	15	±20%	250	210	3.00	3.50	1.70	2.30
APH404020C220MX01	22	±20%	330	275	2.30	2.90	1.30	1.80

● APH404030 Series

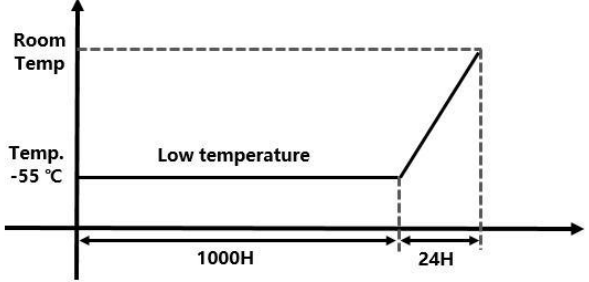
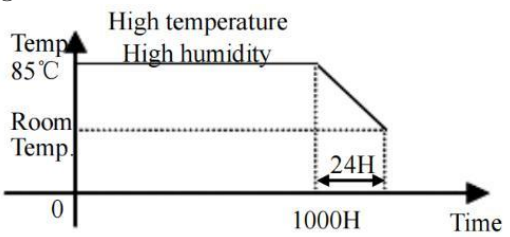
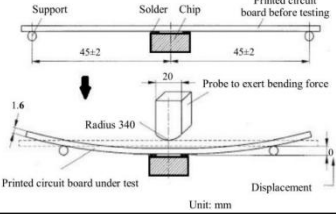
Part Number	Inductance	Inductance Tolerance	DC Resistance		Saturation Current		Heat Rating Current	
	@1MHz,1V		Max.	Typ.	Max.	Typ.	Max.	Typ.
Unit	μH	-	mΩ		A		A	
Symbol	L	-	DCR		Isat		Irms	
APH404030CR33MP01	0.33	±20%	6	4.5	23.00	25.00	15.00	16.00
APH404030CR47MP01	0.47	±20%	7	5.5	21.00	23.00	14.00	15.00
APH404030CR56MP01	0.56	±20%	7.5	6	20.00	22.00	14.00	15.00
APH404030CR68MP01	0.68	±20%	10	8.3	15.00	17.00	8.00	9.50
APH404030C1R0MX01	1	±20%	12	10	14.00	15.50	9.00	10.00
APH404030C1R5MX01	1.5	±20%	18	15	11.00	12.50	6.00	6.50
APH404030C2R2MX01	2.2	±20%	22	19	9.50	10.50	8.50	9.00
APH404030C2R2MX03	2.2	±20%	25	22	10.00	11.00	8.60	9.20
APH404030C3R3MX01	3.3	±20%	35	30	7.50	8.50	4.80	5.30
APH404030C4R7MX01	4.7	±20%	46	41	6.00	7.00	4.00	4.30
APH404030C4R7MP02	4.7	±20%	42	36	6.80	7.80	5.50	6.00
APH404030C5R6MP01	5.6	±20%	48	41	6.20	7.00	5.00	5.50
APH404030C6R8MP01	6.8	±20%	62	51	5.10	6.30	3.80	4.20
APH404030C8R2MP01	8.2	±20%	102	90	4.80	5.20	3.50	3.90
APH404030C100MP01	10	±20%	110	92	4.50	4.90	3.30	3.70
APH404030C150MP01	15	±20%	170	145	3.80	4.20	2.50	2.70
APH404030C220MP01	22	±20%	220	190	3.00	3.40	2.20	2.50
APH404030C470MP01	47	±20%	550	480	2.00	2.20	1.20	1.40

- All test data is referenced to 25 °C ambient.
- Irms:DC current (A) that will cause an approximate ΔT of 40 °C.
- Isat:DC current (A) that will cause L0 to drop approximately 30%.
- The part temperature (ambient + temp rise) should not exceed 125 under °C the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- The rated current as listed is either the saturation current or the heating current depending on which ovalue is lower.

RELIABILITY TEST 可靠性测试

Item	Requirements	Test Methods and Remarks
1. Solderability	1.No case deformation or change in appearance. 2.Terminal area must have 95% min. Solder coverage.	①Temperature:245± 5℃. ②Solder Composition: Sn/Ag3.0/Cu0.5(Pb-Free). ③Sample immersion tin furnace 5 ±0.5s.
2. Adhesion of terminal electrode	1.Strong bond between the pad and the core, without come off PCB.	①Preconditioning: 245℃Reflow 3 times ②Inductors shall be subjected to (260+0/-5℃.)℃ for (10±5)s Soldering in the base whit 0.3mm solder. ③Apply electrode way plus tax X N for (10±1) seconds. 
3. Reflow test	1.No physical damage. 2. $\Delta L_0/L_0$ ≤10%	①The peak temperature: 260+0/-5℃. ②Reflow:3times. ③Temperature curve is as below. 
4. High temperature	1.No physical damage. 2. $\Delta L_0/L_0$ ≤10%	①Preconditioning: Bake at 125+5℃ for 24±0.5H, 245℃Reflow 3 times ②Temperature: 125±2℃. ③Time : 1000 hours. ④Measurement at 24±4 hours after test conclusion. 

RELIABILITY TEST 可靠性测试

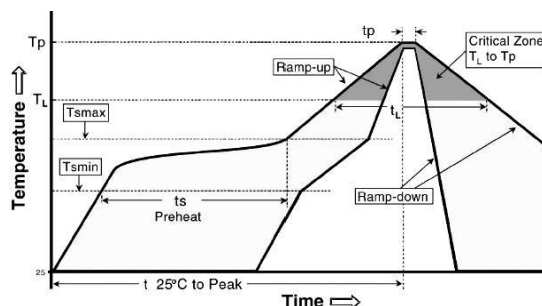
Item	Requirements	Test Methods and Remarks
5. Low temperature	1.No physical damage. 2. $ \Delta L_0/L_0 \leq 10\%$	①Preconditioning: Bake at 125+5℃ for 24±0.5H, 245℃Reflow 3 times ②Temperature: -55±2℃. ③Time : 1000 hours. ④Measurement at 24±4 hours after test conclusion. 
6. Thermal shock	1.No physical damage. 2. $ \Delta L_0/L_0 \leq 10\%$	①Preconditioning: Bake at 125+5℃ for 24±0.5H, 245℃Reflow 3 times ②Repeat 500 cycle as follow : (-55±2℃ ,30±3minutes) (Room temperature, 5 minutes) (+125 ± 2℃ ,30 ± 3minutes) (Room temperature, 5 minutes) ③Measurement at 24±4 hours after test conclusion.
7. Resistance to Soldering Heat	1.No physical damage. 2. $ \Delta L_0/L_0 \leq 10\%$	①Solder Composition: Sn/Ag3.0/Cu0.5(Pb-Free). ②Solder Temperature: 260±5℃. ③Immersion Time: 10±1sec.
8. Static Humidity	1.No physical damage. 2. $ \Delta L_0/L_0 \leq 10\%$	①Preconditioning: Bake at 125+5℃ for 24±0.5H, 245℃Reflow 3 times ②1000 hours, 85℃/85%RH. ③Unpowered. ④Measurement at 24±4 hours after test conclusion. 
9. Board Flex	1.No physical damage. 2. $ \Delta L_0/L_0 \leq 10\%$	①Preconditioning: 245℃Reflow 3 times ②Part mounted on a 100mm*40mm FR4 PCB board, which is 1.6±0.2 mm thick and as a Layer-thickness 35μm ± 10 μm. ③Bending speed is 1mm/s. ④Keeping the P.C Board 2 mm minimum for 60 seconds.  Unit: mm

RELIABILITY TEST 可靠性测试

Item	Requirements	Test Methods and Remarks
10. Vibration	1.No physical damage. 2. $ \Delta L_0/L_0 \leq 10\%$	①Preconditioning: 245℃Reflow 3 times ②Frequency range : 10~2000Hz. ③Amplitude: 1.5mm or 20g. ④Sweep time and duration: 10~2000~10Hz for 20 minutes. ⑤Each four hours in X,Y,Z direction, 12hours in total.
11. Mechanical Shock	1.No physical damage. 2. $ \Delta L_0/L_0 \leq 10\%$	① Preconditioning: 245℃Reflow 3 times ②Peak acceleration:100G/S ③Duration of pulse:6ms ④3times in each of 6($\pm X, \pm Y, \pm Z$) axes.
12. Loading at High Temperature	1.No physical damage. 2. $ \Delta L_0/L_0 \leq 10\%$	①Preconditioning: Bake at 125+5℃ for 24±0.5H, 245℃Reflow 3 times ②Temperature: 85±2℃. ③Time : 1000 hours. ④Applied Current : Rated current. ⑤Measurement at 24±4 hours after test conclusion

SOLDERING CONDITINO 焊接条件

- (This is for recommendation, please customer perform adjustment according to actual application)
- Recommend Reflow Soldering Profile: (solder : Sn96.5 / Ag3 / Cu0.5).

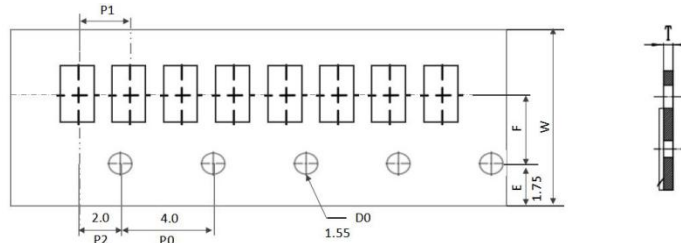


Profile Feature	Lead (Pb)-Free solder
Preheat: Temperature Min (T _{smin}) Temperature Max (T _{smax}) Time (T _{smin} to T _{smax}) (ts)	150℃ 200℃ 60 -120 seconds
Average ramp-up rate: (Ts max to Tp)	3℃ / second max.
Time maintained above : Temperature (T _L) Time (t _L)	217℃ 60-150 seconds
Peak Temperature (Tp)	260℃
Time within $\pm 5^{\circ}\text{C}$ of actual peak Temperature (tp) ²	10 seconds
Ramp-down Rate	6℃/second max.
Time 25℃ to Peak Temperature	8minutes max.

- Allowed Re-flow times : 2 times
- Remark : To avoid discoloration phenomena of chip on terminal electrodes, please use N2 Re-flow Furnace.

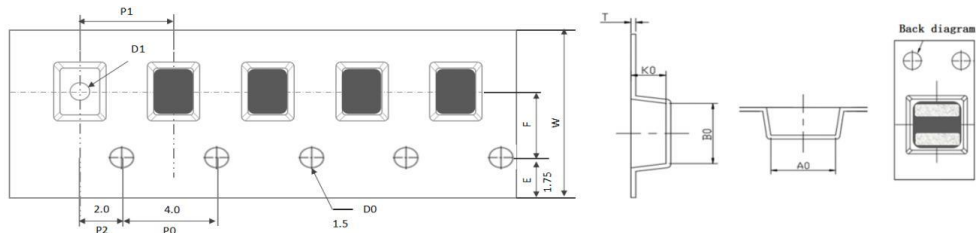
PACKAGING 包装

- Dimension of plastic taping: (Unit: mm)
The following dimensions are related to the actual fit of the machine, for reference only.
- 1005-1007 Series



Series	W	A0	B0	D0	F	P1	T	Packing Quantity
Tolerance	±0.10	±0.04	±0.04	±0.20	±0.10	±0.05	±0.05	
100506	8.0	0.75	1.25	1.55	3.5	2.0	0.65	5K
100765	8.0	0.90	1.20	1.55	3.5	2.0	0.75	
100708	8.0	0.90	1.20	1.55	3.5	2.0	0.95	

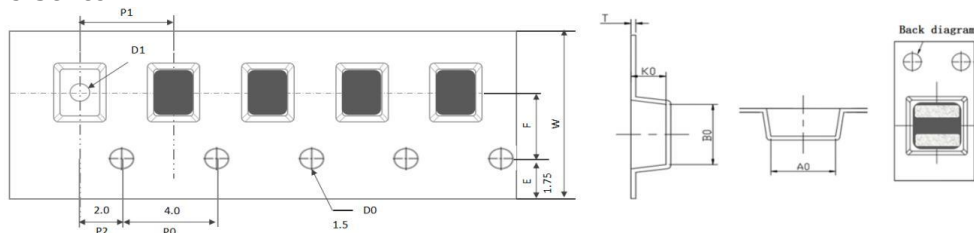
- 1210-2012 Series



Series	W	A0	B0	D1	F	K0	P1	T	Packing Quantity
Tolerance	/	/	/	±0.2	±0.1	/	±0.1	±0.05	
121065	8.0 ±0.10	1.30 ±0.05	1.50 ±0.05	0.70	3.50	2.90 ±0.10	4.0	0.22	3K
141265	8.0 ±0.10	1.50 +0.10/-0.05	1.70 +0.10/-0.05	0.60	3.50	2.90 ±0.10	4.0	0.22	
141207	8.0 ±0.10	1.50 +0.10/-0.05	1.70 +0.10/-0.05	0.60	3.50	0.95 ±0.10	4.0	0.22	
141208	8.0 ±0.10	1.50 +0.10/-0.05	1.70 +0.10/-0.05	0.60	3.50	0.95 ±0.10	4.0	0.22	
160806	8.0 ±0.10	1.0 ±0.05	1.82 ±0.05	0.60	3.50	2.90 ±0.10	4.0	0.22	
160865	8.0 ±0.10	1.0 ±0.05	1.82 ±0.05	0.60	3.50	2.90 ±0.10	4.0	0.22	
160808	8.0 ±0.10	1.04 ±0.05	1.82 ±0.05	0.60	3.50	0.95 ±0.05	4.0	0.22	
201206	8.0 ±0.10	1.40 +0.1/-0.05	2.25 +0.10/-0.05	1.0	3.50	2.90 ±0.10	4.0	0.25	

PACKAGING 包装

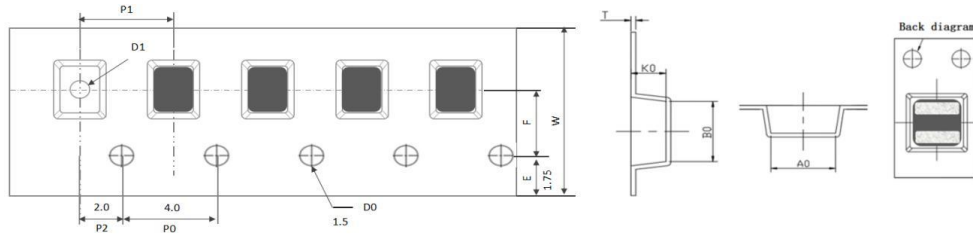
2012-3225 Series



Series	W	A0	B0	D1	F	K0	P1	T	Packing Quantity
Tolerance	/	/	/	±0.2	±0.1	/	±0.1	±0.05	
201265	8.0 ±0.10	1.40 +0.1/-0.05	2.25 +0.10/-0.05	1.0	3.50	2.90 ±0.10	4.0	0.25	3K
201208	8.0 ±0.10	1.50 ±0.10	2.30 ±0.10	1.0	3.50	1.0 ±0.10	4.0	0.22	
201210	8.0 ±0.10	1.50 ±0.10	2.35 ±0.10	1.0	3.50	1.20 ±0.10	4.0	0.22	
201212	8.0 ±0.10	1.50 ±0.10	2.35 ±0.10	1.0	3.50	1.40 ±0.10	4.0	0.22	
201655	8.0 ±0.10	1.95 ±0.10	2.45 ±0.10	1.0	3.50	2.90 ±0.10	4.0	0.25	
201606	8.0 ±0.10	1.95 ±0.10	2.45 ±0.10	1.0	3.50	2.90 ±0.10	4.0	0.25	
201665	8.0 ±0.10	1.95 ±0.10	2.45 ±0.10	1.0	3.50	2.90 ±0.10	4.0	0.25	
201607	8.0 ±0.10	1.90 ±0.10	2.35 ±0.10	1.0	3.50	1.0 ±0.10	4.0	0.25	
201608	8.0 ±0.10	1.90 ±0.10	2.35 ±0.10	1.0	3.50	1.0 ±0.10	4.0	0.25	
201610	8.0 ±0.10	1.95 ±0.10	2.35 ±0.10	1.0	3.50	1.15 ±0.10	4.0	0.25	
201612	8.0 ±0.10	1.90 ±0.10	2.30 ±0.10	1.0	3.50	1.35 ±0.10	4.0	0.25	
252055	8.0 ±0.10	2.35 +0.10/-0.05	2.8 +0.10/-0.05	1.0	3.50	2.90 ±0.10	4.0	0.23	
252075	8.0 ±0.10	2.35 +0.10/-0.05	2.8 +0.10/-0.05	1.0	3.50	1.0 ±0.10	4.0	0.23	
252008	8.0 ±0.10	2.35 +0.10/-0.05	2.8 +0.10/-0.05	1.0	3.50	1.0 ±0.10	4.0	0.23	
252010	8.0 ±0.10	2.45 ±0.10	2.80 ±0.10	1.0	3.50	1.20 ±0.10	4.0	0.25	
252012	8.0 ±0.10	2.35 +0.10/-0.05	2.80 +0.10/-0.05	1.0	3.50	1.35 ±0.10	4.0	0.23	
303010	12.0 ±0.3.0	3.40 ±0.10	3.40 ±0.10	1.50	5.50	1.40 ±0.10	8.0	0.30	
303012	12.0 ±0.3.0	3.40 ±0.10	3.40 ±0.10	1.50	5.50	1.40 ±0.10	8.0	0.30	
303015	12.0 ±0.3.0	3.40 ±0.10	3.40 ±0.10	1.50	5.50	1.70 ±0.10	8.0	0.30	
303018	12.0 ±0.3.0	3.25 ±0.10	3.25 ±0.10	1.50	5.50	2.0 ±0.10	8.0	0.23	
303020	12.0 ±0.3.0	3.40 ±0.10	3.45 ±0.10	1.50	5.50	2.20 ±0.10	8.0	0.30	
322510	8.0 ±0.10	2.80 +0.10/-0.05	3.50 +0.10/-0.05	1.0	3.50	1.15 ±0.10	4.0	0.25	

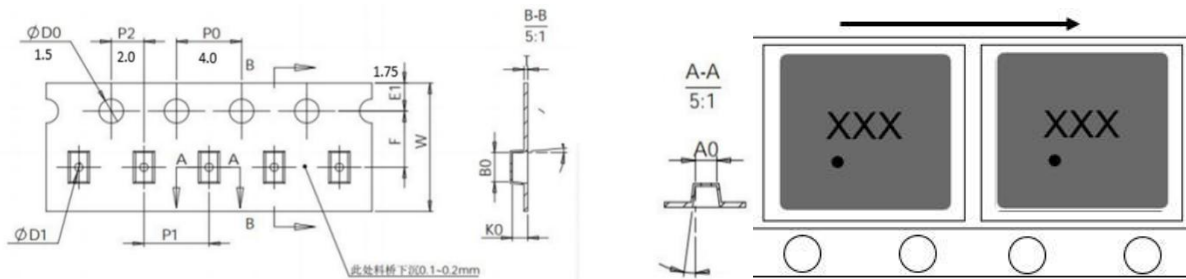
PACKAGING 包装

3225 Series



Series	W	A0	B0	D1	F	K0	P1	T	Packing Quantity
Tolerance	/	/	/	±0.2	±0.1	/	±0.1	±0.05	
322512	8.0 ±0.10	2.90 +0.10/-0.05	3.50 +0.10/-0.05	1.0	3.50	1.35 ±0.10	4.0	0.25	3K
322520	8.0 ±0.10	2.90 +0.10/-0.05	3.50 +0.10/-0.05	1.0	3.50	2.20 ±0.10	4.0	0.23	2K

4040 Series



Series	W	A0	B0	D1	F	K0	P1	T	Packing Quantity
Tolerance	/	/	/	±0.20	±0.10	/	±0.10	±0.05	
404008	12.0 ±0.30	4.40 ±0.10	4.40 ±0.10	1.50	5.50	1.0 ±0.10	8.0	0.30	3K
404010	12.0 ±0.30	4.40 ±0.10	4.40 ±0.10	1.50	5.50	1.30 ±0.10	8.0	0.30	
404012	12.0 ±0.30	4.40 ±0.10	4.40 ±0.10	1.50	5.50	1.30 ±0.10	8.0	0.30	
404015	12.0 ±0.30	4.40 ±0.10	4.40 ±0.10	1.50	5.50	1.70 ±0.10	8.0	0.30	
404020	12.0 ±0.30	4.40 ±0.10	4.40 ±0.10	1.50	5.50	2.20 ±0.10	8.0	0.30	
404030	12.0 ±0.30	4.40 ±0.10	4.40 ±0.10	1.50	5.50	3.20 ±0.10	8.0	0.35	2K

Dimension of Reel: (Unit: mm)

- ☆ Packing size "W=8mm" using 178mm Reel.
- ☆ Packing size "W≥12mm" using 330mm Reel.



Type	A±2.0	B±2.0	C±2.0
All	178	60	13
Type	A±2.0	B±2.0	C±2.0
All	330	100	13

■ PRECAUTIONS 注意事项

- **1.Storage Conditions**
Store products in a warehouse in compliance with the following condition:
Temperature: Inductors (product with taping) +15 to +35℃; Humidity: 25~70%RH.
If the product is not used up 24H after opening, desiccant should be placed in the package and sealed
- **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 chipping and wire breakage.**
- **5.Store products on pallets to protect from humidity, dust, etc.**
- **6.Avoid heat shock, vibration, direct sunlight, etc.**
- **7.When designing the PCB, please consider the installation position of the non-magnetic shielded components to avoid failures caused by magnetic interference.**
- **8.Do not place this product near magnets or objects with magnetic force.**
- **9.The product will self-heat (temperature rise) due to power-on, and sufficient margin should be left in thermal design.**
- **10.Mounting density**
If this product is placed near heat-generating products, be sure to implement sufficient heat-dissipating measures. If this product is subjected to a significant amount of heat from other products, this could adversely affect product quality, resulting in a circuit malfunction or failure of the mounted section. Also, be sure that the product is used in a manner so that the heat that the product is subjected to from other products does not exceed the upper limit of the rated operating temperature for the product.
- **11.Since the static electricity carried by the human body will be transmitted to the ground wire, please use an anti-static wrist strap.**
- **12.Grease on human hands may lead to decreased solderability. Please avoid direct contact with the terminals.**
- **13.This product refers to the general standard used in audio-visual entertainment, home appliances, computers,office automation, communications, power modules, LED lighting, measuring equipment.Machine tools, industrial control panels and other general electronic equipment. And the general electronequipment should be used under the usual operation and usage methods.**
- **14.Reworking with soldering iron**

ITEM	Requirement
Pre-heating	150℃/approx. 1 min
Tip temperature of soldering iron	350℃ max.
Soldering time	3 s (+1 s, -0 s)
Number of reworking operations	1 times max.
It is recommended to replace the product directly, rework may cause poor appearance	
- **15.We cannot warrant against failure caused by any use of our product that deviates from the intended use as described in this product specification.**
- **16.Please approve our product specifications or transact the approval sheet for product specifications before ordering.**
- **17.Our specification limits the quality of the component as a single unit. Please ensure the component is thoroughly evaluated in your application circuit.**

■ SAFETY REMINDERS 注意事项

SAFETY REMINDERS

● All products listed in this specification are developed, designed and intended for use in general electronics equipment. The products are not designed or Warranted to meet the requirements of the applications listed below, whose performance and/or quality require especially high reliability, or whose failure, malfunction or trouble might directly cause damage to society, person, or property. Please understand that we are not responsible for any damage or liability caused by use of the products in any of the applications below. Please contact us for more details if you intend to use our products in the following applications.

- ☆ 1. Aerospace/aviation equipment
- ☆ 2. Transportation equipment (cars, electric trains, ships, etc.)
- ☆ 3. Medical equipment
- ☆ 4. Power-generation control equipment
- ☆ 5. Atomic energy-related equipment
- ☆ 6. Seabed equipment
- ☆ 7. Transportation control equipment
- ☆ 8. Public information-processing equipment
- ☆ 9. Military equipment
- ☆ 10. Electric heating apparatus, burning equipment
- ☆ 11. Disaster prevention/crime prevention equipment
- ☆ 12. Safety equipment
- ☆ 13. Other applications that are not considered general-purpose applications

● When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.