



# 承认书

## APPROVAL SHEET

客户名称:

Customer

/

产品名称:

片式铁氧体磁珠、电感

Part Name

Chip Beads 、 inductors

产品规格:

CBG、CBW、CBM、CBY、CBH、CMI

Specification

版本号:

16.04

Version No.

日期:

2016-12-2

DATE



Manufacturer			Customer		
拟制	审核	确认	检验	审核	批准
Draft by	Checked by	Approve by	Check by	Checked by	Approval by
徐雪枫	覃贤	徐建平			



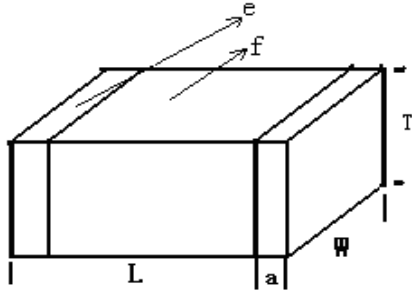
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## 2 外形尺寸与内部结构 Dimension & Inner-configuration:

外形尺寸图:



内部结构图:



- a. 银层 Ag layer
- b. 镀层 Ni/Sn plating
- c. 内电极 Inner electrode
- d. 瓷体 Body
- e. 端电极 Terminal electrode
- f. 瓷体 ferrite or ceramic

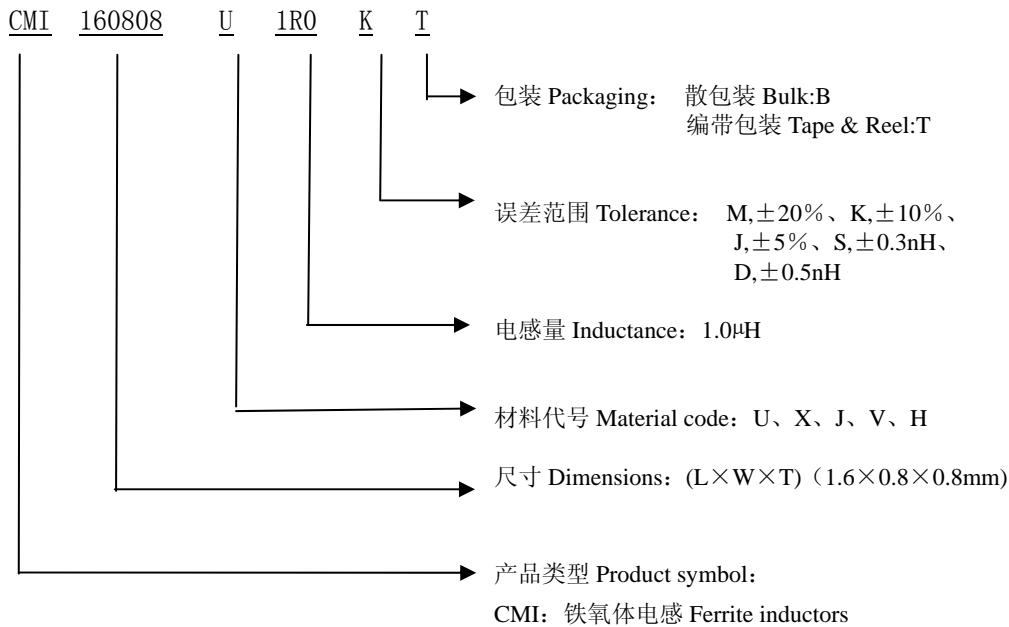
序号 No.	部位 Component		材料 Material
1	瓷体Body		铁氧体电感: 镍铜锌体系Ni-Cu-Zn
2	内电极Inner electrode		纯银Ag
3	端电极 Terminal electrode	银层 Ag layer	银Ag
		Ni/Sn镀层Ni/Sn plating	镍层-锡层Ni-Sn

单位Unit: mm( inch )

型号 Size	L	W	T	a
100505	1.0±0.15 (0.040±0.006)	0.5±0.15 (0.020±0.006)	0.5±0.15 (0.020±0.006)	0.25±0.1(0.010±0.004)
160808	1.6±0.20 (0.063±0.008)	0.8±0.20 (0.031±0.008)	0.8±0.20 (0.031±0.008)	0.3±0.2(0.01±0.008)
201209	2.0±0.20 (0.079±0.008)	1.2±0.20 (0.047±0.008)	0.9±0.20 (0.035±0.008)	0.5±0.3(0.020±0.012)
201212	2.0±0.20 (0.079±0.008)	1.2±0.20 (0.047±0.008)	1.2±0.20 (0.047±0.008)	0.5±0.3(0.020±0.012)
321609	3.2±0.20 (0.126±0.008)	1.6±0.20 (0.063±0.008)	0.9±0.20 (0.035±0.008)	0.5±0.3(0.020±0.012)
321611	3.2±0.20 (0.126±0.008)	1.6±0.20 (0.063±0.008)	1.1±0.20 (0.043±0.008)	0.5±0.3(0.020±0.012)
322513	3.2±0.20 (0.126±0.008)	2.5±0.20 (0.098±0.008)	1.3±0.20 (0.051±0.008)	0.5±0.3(0.020±0.012)
451616	4.5±0.20 (0.180±0.008)	1.6±0.20 (0.063±0.008)	1.6±0.20 (0.063±0.008)	0.5±0.3(0.020±0.012)
453215	4.5±0.20 (0.180±0.008)	3.2±0.20 (0.126±0.008)	1.5±0.20 (0.060±0.008)	0.5±0.3(0.020±0.012)



### 3 产品品名构成 Product Spec. Model







型号规格 Part NO.	客户料号 Customer P/N	误差范围 Tolerance (%)	标称感量 Inductance (μH)	Q 值 (min)	直流电阻 RDC (Ω) max	测试频率 Test frequency (MHz)	测试电压 Test voltage (mV)	自谐振频率 SRF (MHz) min	额定电流 Rated current (mA)max
CMI160808V47NKT		±10	0.047	15	0.20	50	50	260	50
CMI160808V56NKT		±10	0.056	15	0.20	50	50	260	50
CMI160808V68NKT		±10	0.068	15	0.20	50	50	250	50
CMI160808V82NKT		±10	0.082	15	0.20	50	50	245	50
CMI160808VR10KT		±10	0.10	20	0.25	25	50	240	50
CMI160808VR12KT		±10	0.12	20	0.30	25	50	205	50
CMI160808VR15KT		±10	0.15	20	0.30	25	50	180	50
CMI160808VR18KT		±10	0.18	20	0.30	25	50	165	50
CMI160808VR22KT		±10	0.22	20	0.40	25	50	150	50
CMI160808VR27KT		±10	0.27	20	0.45	25	50	136	50
CMI160808VR33KT		±10	0.33	20	0.50	25	50	125	50
CMI160808VR39KT		±10	0.39	20	0.60	25	50	110	50
CMI160808VR47KT		±10	0.47	20	0.70	25	50	105	50
CMI160808VR56KT		±10	0.56	20	0.70	25	50	95	50
CMI160808VR68KT		±10	0.68	20	0.90	25	50	90	50
CMI160808VR82KT		±10	0.82	20	1.00	25	50	85	50
CMI160808U1R0KT		±10	1.0	25	0.50	10	50	75	25
CMI160808U1R2KT		±10	1.2	25	0.55	10	50	65	25
CMI160808U1R5KT		±10	1.5	25	0.70	10	50	60	25
CMI160808U1R8KT		±10	1.8	25	0.75	10	50	55	25
CMI160808U2R2KT		±10	2.2	25	0.80	10	50	50	25
CMI160808U2R7KT		±10	2.7	25	0.90	10	50	45	15
CMI160808U3R3KT		±10	3.3	25	1.00	10	50	40	15
CMI160808U3R9KT		±10	3.9	25	1.30	10	50	35	15
CMI160808X4R7KT		±10	4.7	25	1.50	10	50	33	15
CMI160808X5R6KT		±10	5.6	12	1.55	4	50	22	5
CMI160808J6R8KT		±10	6.8	12	1.55	4	50	20	5
CMI160808J8R2KT		±10	8.2	12	1.65	4	50	18	5
CMI160808J100KT		±10	10	20	1.75	2	50	17	3
CMI160808J120KT		±10	12	20	1.85	2	50	15	3
CMI160808J150MT		±20	15	20	2.50	1	50	14	1
CMI160808J180MT		±20	18	20	2.70	1	50	13	1
CMI160808J220MT		±20	22	20	3.00	1	50	12	1



型号规格 Part NO.	客户料号 Customer P/N	误差范围 Tolerance (%)	标称感量 Inductance (μH)	Q 值 (min)	直流电阻 RDC (Ω) max	测试频率 Test frequency (MHz)	测试电压 Test voltage (mV)	自谐振频率 SRF (MHz) min	额定电流 Rated current (mA)max
CMI201209V47NKT		±10	0.047	25	0.15	50	50	320	300
CMI201209V56NKT		±10	0.056	25	0.15	50	50	320	300
CMI201209V68NKT		±10	0.068	25	0.20	50	50	280	300
CMI201209V82NKT		±10	0.082	25	0.20	50	50	280	300
CMI201209VR10KT		±10	0.10	20	0.20	25	50	235	250
CMI201209VR12KT		±10	0.12	20	0.25	25	50	220	250
CMI201209VR15KT		±10	0.15	20	0.25	25	50	200	250
CMI201209VR18KT		±10	0.18	20	0.30	25	50	185	250
CMI201209VR22KT		±10	0.22	20	0.30	25	50	170	250
CMI201209VR27KT		±10	0.27	20	0.40	25	50	150	250
CMI201209VR33KT		±10	0.33	20	0.40	25	50	145	250
CMI201209VR39KT		±10	0.39	25	0.50	25	50	135	200
CMI201209VR47KT		±10	0.47	25	0.50	25	50	125	200
CMI201209VR56KT		±10	0.56	25	0.60	25	50	115	150
CMI201209VR68KT		±10	0.68	25	0.65	25	50	105	150
CMI201209VR82KT		±10	0.82	25	0.70	25	50	100	150
CMI201209U1R0KT		±10	1.0	35	0.40	10	50	75	50
CMI201209U1R2KT		±10	1.2	35	0.40	10	50	65	50
CMI201209U1R5KT		±10	1.5	35	0.40	10	50	60	50
CMI201209U1R8KT		±10	1.8	35	0.40	10	50	55	50
CMI201209U2R2KT		±10	2.2	35	0.60	10	50	50	50
CMI201209U2R7KT		±10	2.7	35	0.60	10	50	45	50
CMI201209U3R3KT		±10	3.3	35	0.60	10	50	41	50
CMI201209U3R9KT		±10	3.9	35	0.80	10	50	38	50
CMI201209U4R7KT		±10	4.7	35	0.90	10	50	35	30
CMI201209X5R6KT		±10	5.6	30	1.00	4	50	32	15
CMI201209X6R8KT		±10	6.8	30	1.05	4	50	29	15
CMI201209X8R2KT		±10	8.2	30	1.05	4	50	26	15
CMI201209X100KT		±10	10	30	1.15	2	50	24	15
CMI201209X120KT		±10	12	30	1.15	2	50	22	15
CMI201209J150KT		±10	15	25	1.15	1	50	19	5
CMI201209J180KT		±10	18	25	1.20	1	50	18	5
CMI201209J220KT		±10	22	25	1.20	1	50	16	5
CMI201209J270KT		±10	27	25	1.50	1	50	16	5
CMI201209J330MT		±20	33	25	1.50	1	50	16	5
CMI201212J390MT		±20	39	25	1.50	1	50	16	5
CMI201212J470MT		±20	47	25	1.70	1	50	15	5





型号规格 Part NO.	客户料号 Customer P/N	误差范围 Tolerance (%)	标称感量 Inductance (μH)	Q 值 (min)	直流电阻 RDC (Ω) max	测试频率 Test frequency (MHz)	测试电压 Test voltage (mV)	自谐振频率 SRF (MHz) min	额定电流 Rated current (mA)max
CMI321609V47NKT		±10	0.047	30	0.15	50	50	320	300
CMI321609V56NKT		±10	0.056	30	0.20	50	50	320	300
CMI321609V68NKT		±10	0.068	30	0.25	50	50	280	300
CMI321609V82NKT		±10	0.082	30	0.25	50	50	280	300
CMI321609VR10KT		±10	0.10	25	0.25	25	50	235	250
CMI321609VR12KT		±10	0.12	25	0.25	25	50	220	250
CMI321609VR15KT		±10	0.15	25	0.25	25	50	200	250
CMI321609VR18KT		±10	0.18	25	0.30	25	50	185	250
CMI321609VR22KT		±10	0.22	25	0.30	25	50	170	250
CMI321609VR27KT		±10	0.27	25	0.30	25	50	150	250
CMI321609VR33KT		±10	0.33	25	0.30	25	50	145	250
CMI321609VR39KT		±10	0.39	30	0.50	25	50	135	200
CMI321609VR47KT		±10	0.47	30	0.50	25	50	125	200
CMI321609VR56KT		±10	0.56	30	0.50	25	50	115	150
CMI321609VR68KT		±10	0.68	30	0.50	25	50	105	150
CMI321609VR82KT		±10	0.82	30	0.60	25	50	100	150
CMI321609U1R0KT		±10	1.0	35	0.30	10	50	75	100
CMI321609U1R2KT		±10	1.2	35	0.40	10	50	65	100
CMI321609U1R5KT		±10	1.5	35	0.40	10	50	60	50
CMI321609U1R8KT		±10	1.8	35	0.40	10	50	55	50
CMI321609U2R2KT		±10	2.2	35	0.50	10	50	50	50
CMI321609U2R7KT		±10	2.7	35	0.50	10	50	45	50
CMI321609U3R3KT		±10	3.3	35	0.50	10	50	41	50
CMI321609U3R9KT		±10	3.9	35	0.60	10	50	38	50
CMI321609U4R7KT		±10	4.7	35	0.65	10	50	35	25
CMI321609U5R6KT		±10	5.6	35	0.80	4	50	32	25
CMI321609X6R8KT		±10	6.8	35	0.80	4	50	29	25
CMI321609X8R2KT		±10	8.2	35	0.80	4	50	26	25
CMI321609X100KT		±10	10	35	0.80	2	50	24	25
CMI321609X120KT		±10	12	35	0.90	2	50	22	15
CMI321609J150KT		±10	15	30	1.00	1	50	19	5
CMI321609J180KT		±10	18	30	1.00	1	50	18	5
CMI321609J220KT		±10	22	30	1.20	1	50	16	5
CMI321609J270KT		±10	27	30	1.20	1	50	14	5
CMI321609J330KT		±10	33	30	1.30	1	50	13	5
CMI321609J390KT		±10	39	30	1.30	1	50	13	5
CMI321611J470KT		±10	47	30	1.60	1	50	12	5
CMI321611J560MT		±20	56	30	1.80	1	50	12	5
CMI321611J680MT		±20	68	30	2.00	1	50	11	5
CMI321611J820MT		±20	82	30	2.40	1	50	11	5
CMI321611J101MT		±20	100	30	3.00	1	50	8	5









型号规格 Part NO.	客户料号 Customer P/N	误差 范围 Tolerance	标称阻抗 Impedance (Ω)	直流电阻 RDC (Ω)max	测试频率 Test frequency (MHz)	测试电压 Test voltage (mV)	额定电流 Rated current (mA)max
CBG160808U000T		0~15Ω	0	0.10	100	50	800
CBG160808U050T		0~15Ω	5	0.10	100	50	800
CBG160808U070T		0~11Ω	7	0.10	100	50	800
CBG160808U090T		5~13Ω	9	0.10	100	50	800
CBG160808U110T		7~15Ω	11	0.10	100	50	800
CBG160808U150T		9~21Ω	15	0.10	100	50	800
CBG160808U190T		12~25Ω	19	0.10	100	50	800
CBG160808U260T		±25%	26	0.10	100	50	500
CBG160808U310T		±25%	31	0.10	100	50	500
CBG160808U600T		±25%	60	0.20	100	50	300
CBG160808U700T		±25%	70	0.20	100	50	300
CBG160808U800T		±25%	80	0.20	100	50	300
CBG160808U101T		±25%	100	0.20	100	50	300
CBG160808U121T		±25%	120	0.20	100	50	300
CBG160808U151T		±25%	150	0.30	100	50	300
CBG160808U181T		±25%	180	0.30	100	50	300
CBG160808U221T		±25%	220	0.30	100	50	300
CBG160808U301T		±25%	300	0.35	100	50	200
CBG160808U501T		±25%	500	0.50	100	50	200
CBG160808U601T		±25%	600	0.50	100	50	200
CBG160808U801T		±25%	800	0.60	100	50	200
CBG160808U102T		±25%	1000	0.60	100	50	200
CBG160808U122T		±25%	1200	0.85	100	50	100
CBG160808U152T		±25%	1500	0.85	100	50	50
CBG160808U202T		±25%	2000	1.10	100	50	50
CBG160808U222T		±25%	2200	1.20	100	50	50
CBG160808U252T		±25%	2500	1.30	100	50	50



型号规格 Part NO.	客户料号 Customer P/N	误差 范围 Tolerance	标称阻抗 Impedance ( $\Omega$ )	直流电阻 RDC ( $\Omega$ )max	测试频率 Test frequency (MHz)	测试电压 Test voltage (mV)	额定电流 Rated current (mA)max
CBG201209U000T		0~15 $\Omega$	0	0.08	100	50	900
CBG201209U050T		0~15 $\Omega$	5	0.08	100	50	900
CBG201209U070T		0~11 $\Omega$	7	0.08	100	50	900
CBG201209U090T		5~13 $\Omega$	9	0.10	100	50	900
CBG201209U110T		7~15 $\Omega$	11	0.10	100	50	900
CBG201209U150T		9~21 $\Omega$	15	0.10	100	50	900
CBG201209U190T		12~25 $\Omega$	19	0.10	100	50	900
CBG201209U260T		$\pm 25\%$	26	0.10	100	50	900
CBG201209U310T		$\pm 25\%$	31	0.10	100	50	900
CBG201209U360T		$\pm 25\%$	36	0.10	100	50	900
CBG201209U600T		$\pm 25\%$	60	0.15	100	50	900
CBG201209U700T		$\pm 25\%$	70	0.18	100	50	500
CBG201209U800T		$\pm 25\%$	80	0.18	100	50	500
CBG201209U101T		$\pm 25\%$	100	0.18	100	50	500
CBG201209U121T		$\pm 25\%$	120	0.20	100	50	500
CBG201209U151T		$\pm 25\%$	150	0.20	100	50	400
CBG201209U181T		$\pm 25\%$	180	0.20	100	50	400
CBG201209U221T		$\pm 25\%$	220	0.20	100	50	400
CBG201209U301T		$\pm 25\%$	300	0.25	100	50	400
CBG201209U501T		$\pm 25\%$	500	0.35	100	50	300
CBG201209U601T		$\pm 25\%$	600	0.35	100	50	300
CBG201209U801T		$\pm 25\%$	800	0.40	100	50	300
CBG201209U102T		$\pm 25\%$	1000	0.40	100	50	300
CBG201209U122T		$\pm 25\%$	1200	0.60	100	50	100
CBG201209U152T		$\pm 25\%$	1500	0.70	100	50	100
CBG201209U182T		$\pm 25\%$	1800	0.90	100	50	50
CBG201209U202T		$\pm 25\%$	2000	0.90	100	50	50
CBG201209U222T		$\pm 25\%$	2200	1.00	100	50	50
CBG201209U252T		$\pm 25\%$	2500	1.20	50	50	50
CBG201209U272T		$\pm 25\%$	2700	1.40	50	50	30



型号规格 Part NO.	客户料号 Customer P/N	误差 范围 Tolerance	标称阻抗 Impedance ( $\Omega$ )	直流电阻 RDC ( $\Omega$ )max	测试频率 Test frequency (MHz)	测试电压 Test voltage (mV)	额定电流 Rated current (mA)max
CBG321609U000T		0~15 $\Omega$	0	0.10	100	50	1000
CBG321609U050T		0~15 $\Omega$	5	0.10	100	50	1000
CBG321609U070T		0~11 $\Omega$	7	0.10	100	50	1000
CBG321609U090T		5~13 $\Omega$	9	0.10	100	50	1000
CBG321609U110T		7~15 $\Omega$	11	0.10	100	50	1000
CBG321609U150T		9~21 $\Omega$	15	0.10	100	50	1000
CBG321609U190T		12~25 $\Omega$	19	0.10	100	50	1000
CBG321609U260T		$\pm 25\%$	26	0.10	100	50	1000
CBG321609U310T		$\pm 25\%$	31	0.10	100	50	1000
CBG321609U600T		$\pm 25\%$	60	0.15	100	50	1000
CBG321609U700T		$\pm 25\%$	70	0.15	100	50	1000
CBG321609U800T		$\pm 25\%$	80	0.15	100	50	1000
CBG321609U101T		$\pm 25\%$	100	0.15	100	50	1000
CBG321609U121T		$\pm 25\%$	120	0.15	100	50	1000
CBG321609U151T		$\pm 25\%$	150	0.20	100	50	800
CBG321609U181T		$\pm 25\%$	180	0.20	100	50	800
CBG321609U221T		$\pm 25\%$	220	0.20	100	50	800
CBG321609U301T		$\pm 25\%$	300	0.20	100	50	800
CBG321609U501T		$\pm 25\%$	500	0.30	100	50	600
CBG321609U601T		$\pm 25\%$	600	0.30	100	50	600
CBG321609U801T		$\pm 25\%$	800	0.35	100	50	400
CBG321609U102T		$\pm 25\%$	1000	0.35	100	50	400
CBG321609U122T		$\pm 25\%$	1200	0.60	100	50	100
CBG321609U152T		$\pm 25\%$	1500	0.80	50	50	100
CBG321609U182T		$\pm 25\%$	1800	0.90	50	50	80
CBG321609U202T		$\pm 25\%$	2000	1.00	50	50	50
CBG321609U252T		$\pm 25\%$	2500	1.20	50	50	50
CBG321609U302T		$\pm 25\%$	3000	1.50	50	50	30











型号规格 Part NO.	客户料号 Customer P/N	误差 范围 Tolerance	标称阻抗 Impedance ( $\Omega$ )	直流电阻 RDC ( $\Omega$ )max	测试频率 Test frequency (MHz)	测试电压 Test voltage (mV)	额定电流 Rated current (mA)max
CBW100505U000T		0~15 $\Omega$	0	0.04	100	50	800
CBW100505U050T		0~15 $\Omega$	5	0.04	100	50	800
CBW100505U070T		0~11 $\Omega$	7	0.04	100	50	800
CBW100505U090T		5~13 $\Omega$	9	0.04	100	50	800
CBW100505U110T		7~15 $\Omega$	11	0.04	100	50	800
CBW100505U150T		9~21 $\Omega$	15	0.04	100	50	800
CBW100505U190T		12~25 $\Omega$	19	0.06	100	50	700
CBW100505U260T		$\pm 25\%$	26	0.06	100	50	700
CBW100505U310T		$\pm 25\%$	31	0.08	100	50	700
CBW100505U360T		$\pm 25\%$	36	0.15	100	50	600
CBW100505U500T		$\pm 25\%$	50	0.15	100	50	600
CBW100505U600T		$\pm 25\%$	60	0.15	100	50	600
CBW100505U700T		$\pm 25\%$	70	0.20	100	50	450
CBW100505U750T		$\pm 25\%$	75	0.20	100	50	450
CBW100505U800T		$\pm 25\%$	80	0.20	100	50	450
CBW100505U101T		$\pm 25\%$	100	0.20	100	50	450
CBW100505U121T		$\pm 25\%$	120	0.25	100	50	450
CBW100505U151T		$\pm 25\%$	150	0.25	100	50	450
CBW100505U181T		$\pm 25\%$	180	0.40	100	50	300
CBW100505U221T		$\pm 25\%$	220	0.40	100	50	300
CBW100505U301T		$\pm 25\%$	300	0.50	100	50	300
CBW100505U501T		$\pm 25\%$	500	0.65	100	50	200
CBW100505U601T		$\pm 25\%$	600	0.70	100	50	200
CBW100505U801T		$\pm 25\%$	800	0.90	100	50	200
CBW100505U102T		$\pm 25\%$	1000	1.00	100	50	200
CBW100505U122T		$\pm 25\%$	1200	1.00	100	50	200



型号规格 Part NO.	客户料号 Customer P/N	误差 范围 Tolerance	标称阻抗 Impedance ( $\Omega$ )	直流电阻 RDC ( $\Omega$ )max	测试频率 Test frequency (MHz)	测试电压 Test voltage (mV)	额定电流 Rated current (mA)max
CBW160808U000T		0~15 $\Omega$	0	0.08	100	50	1000
CBW160808U050T		0~15 $\Omega$	5	0.08	100	50	1000
CBW160808U070T		0~11 $\Omega$	7	0.08	100	50	1000
CBW160808U090T		5~13 $\Omega$	9	0.08	100	50	1000
CBW160808U110T		7~15 $\Omega$	11	0.08	100	50	1000
CBW160808U150T		9~21 $\Omega$	15	0.08	100	50	1000
CBW160808U190T		12~25 $\Omega$	19	0.08	100	50	1000
CBW160808U260T		$\pm 25\%$	26	0.08	100	50	1000
CBW160808U300T		$\pm 25\%$	30	0.08	100	50	1000
CBW160808U310T		$\pm 25\%$	31	0.08	100	50	1000
CBW160808U500T		$\pm 25\%$	50	0.12	100	50	1000
CBW160808U600T		$\pm 25\%$	60	0.12	100	50	1000
CBW160808U700T		$\pm 25\%$	70	0.15	100	50	1000
CBW160808U800T		$\pm 25\%$	80	0.15	100	50	1000
CBW160808U101T		$\pm 25\%$	100	0.15	100	50	1000
CBW160808U121T		$\pm 25\%$	120	0.15	100	50	1000
CBW160808U151T		$\pm 25\%$	150	0.20	100	50	1000
CBW160808U181T		$\pm 25\%$	180	0.20	100	50	1000
CBW160808U221T		$\pm 25\%$	220	0.20	100	50	1000
CBW160808U301T		$\pm 25\%$	300	0.25	100	50	1000
CBW160808U501T		$\pm 25\%$	500	0.30	100	50	1000
CBW160808U601T		$\pm 25\%$	600	0.30	100	50	1000
CBW160808U801T		$\pm 25\%$	800	0.55	100	50	500
CBW160808U102T		$\pm 25\%$	1000	0.55	100	50	500
CBW160808U122T		$\pm 25\%$	1200	0.65	100	50	500
CBW160808U152T		$\pm 25\%$	1500	0.75	100	50	400
CBW160808U182T		$\pm 25\%$	1800	0.75	100	50	400
CBW160808U202T		$\pm 25\%$	2000	0.90	100	50	400
CBW160808U252T		$\pm 25\%$	2500	0.90	100	50	400



型号规格 Part NO.	客户料号 Customer P/N	误差 范围 Tolerance	标称阻抗 Impedance ( $\Omega$ )	直流电阻 RDC ( $\Omega$ )max	测试频率 Test frequency (MHz)	测试电压 Test voltage (mV)	额定电流 Rated current (mA)max
CBW201209U000T		0~15 $\Omega$	0	0.03	100	50	3000
CBW201209U050T		0~15 $\Omega$	5	0.03	100	50	3000
CBW201209U070T		0~11 $\Omega$	7	0.03	100	50	3000
CBW201209U090T		5~13 $\Omega$	9	0.03	100	50	3000
CBW201209U110T		7~15 $\Omega$	11	0.03	100	50	3000
CBW201209U150T		9~21 $\Omega$	15	0.03	100	50	3000
CBW201209U190T		12~25 $\Omega$	19	0.03	100	50	3000
CBW201209U300T		$\pm 25\%$	30	0.05	100	50	3000
CBW201209U310T		$\pm 25\%$	31	0.05	100	50	3000
CBW201209U360T		$\pm 25\%$	36	0.06	100	50	3000
CBW201209U600T		$\pm 25\%$	60	0.06	100	50	3000
CBW201209U700T		$\pm 25\%$	70	0.08	100	50	2500
CBW201209U800T		$\pm 25\%$	80	0.08	100	50	2500
CBW201209U101T		$\pm 25\%$	100	0.10	100	50	2500
CBW201209U121T		$\pm 25\%$	120	0.10	100	50	2000
CBW201209U151T		$\pm 25\%$	150	0.10	100	50	2000
CBW201209U181T		$\pm 25\%$	180	0.15	100	50	2000
CBW201209U201T		$\pm 25\%$	200	0.15	100	50	2000
CBW201209U221T		$\pm 25\%$	220	0.15	100	50	2000
CBW201209U301T		$\pm 25\%$	300	0.20	100	50	2000
CBW201209U501T		$\pm 25\%$	500	0.25	100	50	1500
CBW201209U601T		$\pm 25\%$	600	0.25	100	50	1500
CBW201209U801T		$\pm 25\%$	800	0.30	100	50	800
CBW201209U102T		$\pm 25\%$	1000	0.30	100	50	800
CBW201209U122T		$\pm 25\%$	1200	0.45	100	50	500
CBW201209U152T		$\pm 25\%$	1500	0.50	100	50	300
CBW201209U202T		$\pm 25\%$	2000	0.50	100	50	300
CBW201209U222T		$\pm 25\%$	2200	0.60	100	50	100
CBW201209U252T		$\pm 25\%$	2500	0.60	50	50	100



型号规格 Part NO.	客户料号 Customer P/N	误差 范围 Tolerance	标称阻抗 Impedance ( $\Omega$ )	直流电阻 RDC ( $\Omega$ )max	测试频率 Test frequency (MHz)	测试电压 Test voltage (mV)	额定电流 Rated current (mA)max
CBW321609U000T		0~15 $\Omega$	0	0.04	100	50	4000
CBW321609U050T		0~15 $\Omega$	5	0.04	100	50	4000
CBW321609U070T		0~11 $\Omega$	7	0.04	100	50	4000
CBW321609U090T		5~13 $\Omega$	9	0.05	100	50	4000
CBW321609U110T		7~15 $\Omega$	11	0.05	100	50	4000
CBW321609U150T		9~21 $\Omega$	15	0.05	100	50	3000
CBW321609U190T		12~25 $\Omega$	19	0.05	100	50	3000
CBW321609U260T		$\pm 25\%$	26	0.05	100	50	3000
CBW321609U280T		$\pm 25\%$	28	0.07	100	50	3000
CBW321609U300T		$\pm 25\%$	30	0.07	100	50	3000
CBW321609U310T		$\pm 25\%$	31	0.07	100	50	3000
CBW321609U500T		$\pm 25\%$	50	0.07	100	50	3000
CBW321609U600T		$\pm 25\%$	60	0.07	100	50	3000
CBW321609U700T		$\pm 25\%$	70	0.07	100	50	3000
CBW321609U800T		$\pm 25\%$	80	0.07	100	50	3000
CBW321609U101T		$\pm 25\%$	100	0.07	100	50	3000
CBW321609U121T		$\pm 25\%$	120	0.07	100	50	3000
CBW321609U151T		$\pm 25\%$	150	0.12	100	50	2500
CBW321609U181T		$\pm 25\%$	180	0.12	100	50	2500
CBW321609U221T		$\pm 25\%$	220	0.12	100	50	2500
CBW321609U301T		$\pm 25\%$	300	0.15	100	50	2000
CBW321609U501T		$\pm 25\%$	500	0.20	100	50	2000
CBW321609U601T		$\pm 25\%$	600	0.20	100	50	2000
CBW321609U801T		$\pm 25\%$	800	0.25	100	50	2000
CBW321609U102T		$\pm 25\%$	1000	0.25	100	50	2000
CBW321609U122T		$\pm 25\%$	1200	0.35	100	50	1000
CBW321609U152T		$\pm 25\%$	1500	0.45	50	50	500
CBW321609U182T		$\pm 25\%$	1800	0.60	50	50	500
CBW321609U202T		$\pm 25\%$	2000	0.70	50	50	300
CBW321609U252T		$\pm 25\%$	2500	0.90	50	50	200
CBW321609U302T		$\pm 25\%$	3000	0.90	50	50	200

















型号规格 Part NO.	客户料号 Customer P/N	误差 范围 Tolerance	标称阻抗 Impedance ( $\Omega$ )	直流电阻 RDC ( $\Omega$ )max	测试频率 Test frequency (MHz)	测试电压 Test voltage (mV)	额定电流 Rated current (mA)max
CBM321609U000T		0~15 $\Omega$	0	0.01	100	50	6000
CBM321609U050T		0~15 $\Omega$	5	0.01	100	50	6000
CBM321609U070T		0~11 $\Omega$	7	0.01	100	50	6000
CBM321609U090T		5~13 $\Omega$	9	0.015	100	50	6000
CBM321609U110T		7~15 $\Omega$	11	0.015	100	50	6000
CBM321609U150T		9~21 $\Omega$	15	0.015	100	50	6000
CBM321609U190T		12~25 $\Omega$	19	0.015	100	50	6000
CBM321609U260T		$\pm 25\%$	26	0.015	100	50	6000
CBM321609U280T		$\pm 25\%$	28	0.015	100	50	6000
CBM321609U300T		$\pm 25\%$	30	0.015	100	50	6000
CBM321609U310T		$\pm 25\%$	31	0.025	100	50	4000
CBM321609U500T		$\pm 25\%$	50	0.025	100	50	4000
CBM321609U600T		$\pm 25\%$	60	0.025	100	50	4000
CBM321609U700T		$\pm 25\%$	70	0.035	100	50	4000
CBM321609U800T		$\pm 25\%$	80	0.035	100	50	4000
CBM321609U101T		$\pm 25\%$	100	0.035	100	50	4000
CBM321609U121T		$\pm 25\%$	120	0.035	100	50	4000
CBM321609U151T		$\pm 25\%$	150	0.045	100	50	3000
CBM321609U181T		$\pm 25\%$	180	0.055	100	50	3000
CBM321609U221T		$\pm 25\%$	220	0.055	100	50	3000
CBM321609U301T		$\pm 25\%$	300	0.065	100	50	2500
CBM321609U501T		$\pm 25\%$	500	0.085	100	50	2500
CBM321609U601T		$\pm 25\%$	600	0.10	100	50	2000
CBM321609U801T		$\pm 25\%$	800	0.11	100	50	2000
CBM321609U102T		$\pm 25\%$	1000	0.12	100	50	2000



















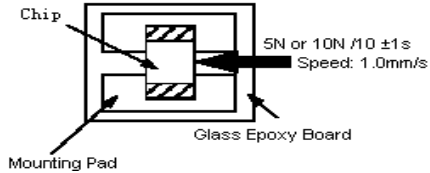
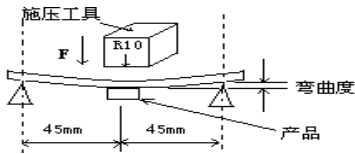




## 5 可靠性试验项目 Reliability Testing Items

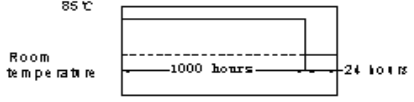
序号 No.	项目 Items	要求 Requirements	试验方法及备注 Test Methods and Remarks
1	工作温度范围 Operating Temperature Range	-40℃~+85℃	
2	可焊 Solder ability	至少 90%端电极表面被焊锡覆盖。 At least 90% of terminal electrode should be covered with solder	<p>预热温度:120 ~ 150℃            预热时间: 60s            焊料: (96.5Sn/3.0Ag/0.5Cu) 焊锡            焊锡温度: 245±5℃            浸锡时间 : 5±1s            浸入松香助焊剂约 3 ~ 5 s            浸入速度: 25mm/sec            Preheating temperature: 120 to 150℃            Preheating time: 60s            Solder 96.5Sn/3.0Ag/0.5Cu of the Sn solder.            Solder temperature: 245±5℃            Duration : 5±1s            Immersion into the colophony flux for 3 to 5 sec.            Immersion speed: 25mm/sec</p>
3	耐焊接热 Resistance to Soldering	<p>至少 75%的焊锡覆盖在端电极表面, 无可见机械损伤。            电感量变化率如下:            铁氧体电感 (V、U 料): ±20%            铁氧体电感 (X 料): ±25%            铁氧体电感 (J 料): ±30%            品质因素变化率 (铁氧体) 小于±30%, 阻抗变化率小于±30%。            At least 75% of terminal electrode should be covered with solder.            No mechanical damage.            Inductance :            V、U : change within ±20%            X : change within ±25%            J : change within ±30%            Q value change(ferrite): within ±30%            Impedance change: within ±30%</p>	<p>预热温度: 120 ~ 150℃            预热时间: 60s            焊料: (96.5Sn/3.0Ag/0.5Cu) 焊锡            浸锡温度: 260±5℃            浸锡时间 : 10±1s            浸入松香助焊剂约 3 ~ 5 s            浸入速度: 25mm/sec            Preheating temperature: 120 to 150℃            Preheating time: 60s            Solder 96.5Sn/3.0Ag/0.5Cu of the Sn solder.            Solder temperature: 260±5℃            Duration : 10±1s            Immersion into the colophony flux for 3 to 5 sec.            Immersion speed: 25mm/sec</p>



序号 No.	项目 Items	要求 Requirements	试验方法及备注 Test Methods and Remarks
4	端电极强度 Adhesion of electrode	端电极与磁体不应受损，无可见机械损伤。 The termination and body should be no damage.	施加力: 1005 和 1608 系列为 5N; 2012、3216、3225、4516、4532 系列为 10N。 保持时间: 10±1S Applied force: 5N force for 1005 and 1608 series. 10N force for 2012、3216、3225、4516、4532 series. Keep time : 10±1S 
5	耐低温 Low temperature resistance	无可见机械损伤， 电感量变化率小于±10%， 品质因素变化率（铁氧体）小于±30%， 阻抗变化率小于±30%。 No mechanical damage. Inductance change: within ±10% Q value change(ferrite): within ±30% Impedance change: within ±30%	测试温度: -55±2℃ +24 测试时间: 500-0 h Temperature: -55±2℃ +24 Testing time: 500 <sup>-0</sup> h
6	抗弯强度 Bending strength	无可见机械损伤， 电感量变化率小于±10%， 品质因素变化率（铁氧体）小于±30%， 阻抗变化率小于±30%。 No mechanical damage. Inductance change: within ±10% Q value change(ferrite): within ±30% Impedance change: within ±30%	弯度: 2mm 测试基板: 玻璃环氧树脂基板 厚度: 0.8mm Warp: 2mm Testing board: glass epoxy-resin substrate Thickness: 0.8mm 





序号 No.	项目 Items	要求 Requirements	试验方法及备注 Test Methods and Remarks
7	跌落 Drop	无可见机械损伤, 电感量变化率小于±10%, 品质因素变化率(铁氧体)小于±30%, 阻抗变化率小于±30%。 No mechanical damage. Inductance change: within ±10% Q value change(ferrite): within ±30% Impedance change: within ±30%	从高度为 1 米的空中自由落到混凝土地板重复 10 次。 Drop 10 times on a concrete floor from a high of 1m.
8	振动 Vibration	无可见机械损伤, 电感量变化率小于±10%, 品质因素变化率(铁氧体)小于±30%, 阻抗变化率小于±30%。 No mechanical damage. Inductance change: within ±10% Q value change(ferrite): within ±30% Impedance change: within ±30%	振幅:1.5mm 测试时间:沿三个垂直方向轴各做 2 小时 频率范围:10Hz ~ 55Hz ~ 10Hz (1 分钟) Amplitude modulation: 1.5mm Test time: A period of 2h in each of 3 mutually perpendicular directions. Frequency range: 10Hz to 55Hz to 10Hz for 1min.
9	耐高温 High temperature resistance	无可见机械损伤, 电感量变化率小于±10%, 品质因素变化率(铁氧体)小于±30%, 阻抗变化率小于±30%。 No mechanical damage. Inductance change: within ±10% Q value change(ferrite): within ±30% Impedance change: within ±30%	施加额定电流(仅适用于大电流磁珠) 测试时间: $1000^{+24}_{-0}$ h 测试温度: $85 \pm 2^{\circ}\text{C}$  Applied current: rated current(CBW Series) Testing time: $1000^{+24}_{-0}$ h Temperature: $85 \pm 2^{\circ}\text{C}$



序号 No.	项目 Items	要求 Requirements	试验方法及备注 Test Methods and Remarks
10	恒定湿热 Static Humidity	无可见机械损伤, 电感量变化率小于±10%, 品质因素变化率(铁氧体)小于±30%, 阻抗变化率小于±30%。 No mechanical damage. Inductance change: within ±10% Q value change(ferrite): within ±30% Impedance change: within ±30%	湿度:90~95% RH, 温度:55±2℃ +24 测试时间:500 <sup>-0</sup> h Humidity: 90 to 95% RH Temperature: 55±2℃ +24 Testing time: 500 <sup>-0</sup> h 
11	温度循环 Thermal Shock	无可见机械损伤, 电感量变化率小于±10%, 品质因素变化率(铁氧体)小于±30%, 阻抗变化率小于±30%。 No mechanical damage. Inductance change: within ±10% Q value change(ferrite): within ±30% Impedance change: within ±30%	温度: -40℃, 30±3 分钟 +85℃, 30±3 分钟 转换时间: 20 秒(最大) 循环次数: 32 Temperature: -40℃ for 30±3min +85℃ for 30±3min Transforming interval :max 20 sec Number of cycles: 32 

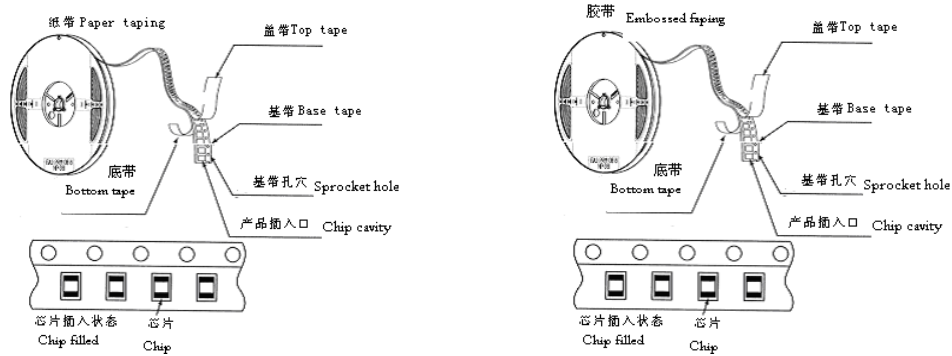
注: 以上要求测试电性能的项目, 应试验后在标准条件下放置 24 小时后测试。

**Note: When there are questions concerning, measurement shall be made after 24±2hrs of recovery under the standard condition.**



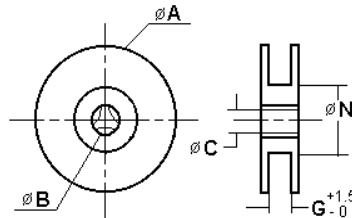
## 6 产品包装 Packaging

### 1) 编带图 Taping drawings

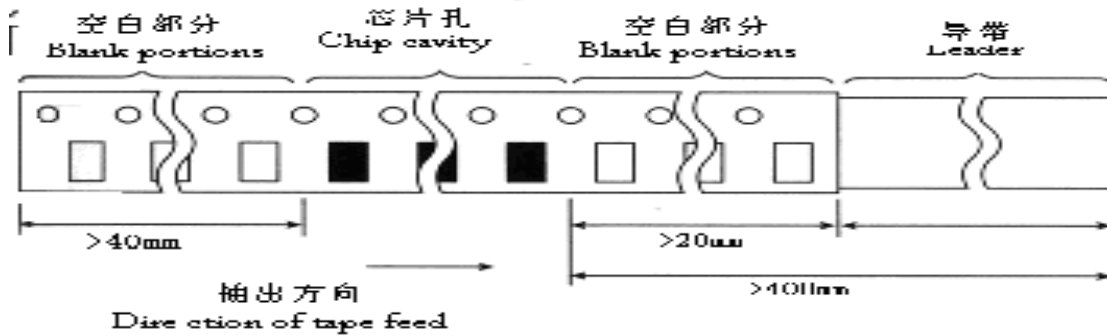


### 2) 卷盘尺寸 Reel dimensions (Unit:mm)

	A	B	C	N	G
CF-8	178 ±2.0	22.0 ±2.0	12.5 ±1.5	57 ±2.0	8
CF-12	330±2 .0	22.0± 2.0	12.5± 1.5	98 ±2.0	1 2

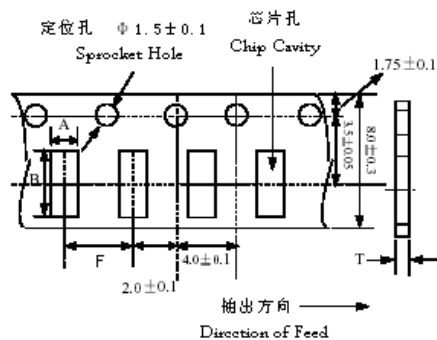


### 3) 导带及空格部分 Leader and blank portion



### 4) 编带尺寸 Taping dimensions (Unit: mm)

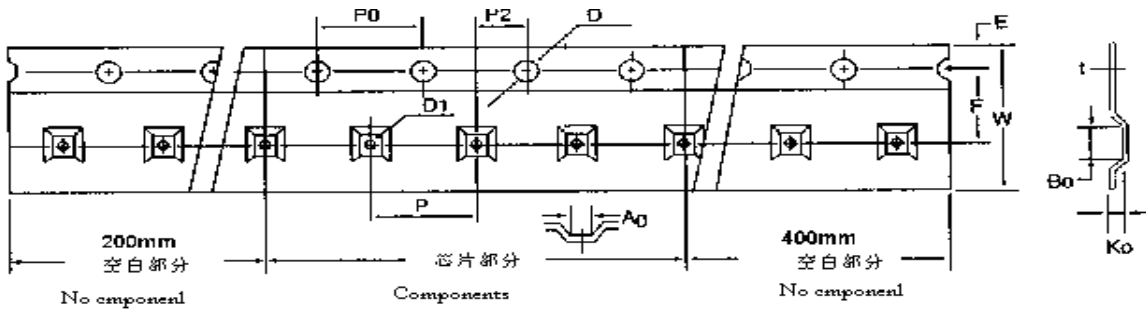
#### 纸带 Paper tape



Part NO.	A	B	F	T
100505	0.65±0.1	1.15±0.1	2.0±0.05	0.8max
160808	1.1±0.2	1.9±0.2	4.0±0.2	1.1max
201209	1.5±0.2	2.3±0.2	4.0±0.2	1.1max
321609	1.9±0.2	3.5±0.2	4.0±0.2	1.1max

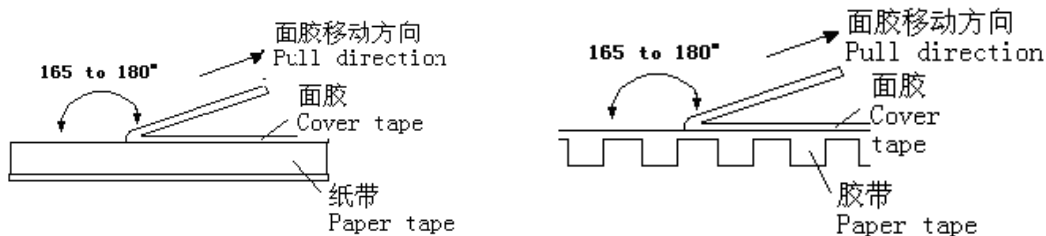


5) 塑料胶带 Embossed tape



	4532	4516	3225	3216	2012
W	12.0+/-0.2	12.0+/-0.2	8.1+/-0.2	8.1+/-0.2	8.1+/-0.2
P	8.0+/-0.10	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10
E	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10
F	5.50+/-0.10	5.50+/-0.10	3.50+/-0.10	3.50+/-0.10	3.50+/-0.10
D	1.55+/-0.05	1.55+/-0.05	1.55+/-0.05	1.55+/-0.05	1.55+/-0.05
D1	1.50+/-0.10	1.50+/-0.10	1.00+/-0.10	1.00+/-0.10	1.00+/-0.10
P <sub>0</sub>	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10
P <sub>010</sub>	40.0+/-0.20	40.0+/-0.20	40.0+/-0.20	40.0+/-0.20	40.0+/-0.20
P <sub>2</sub>	2.0+/-0.05	2.0+/-0.05	2.0+/-0.05	2.0+/-0.05	2.0+/-0.05
A <sub>0</sub>	3.66+/-0.10	1.93+/-0.10	2.80+/-0.10	1.90+/-0.10	1.52+/-0.10
B <sub>0</sub>	4.95+/-0.10	4.95+/-0.10	3.50+/-0.10	3.51+/-0.10	2.41+/-0.10
t	0.23+/-0.10	0.23+/-0.10	0.23+/-0.10	0.23+/-0.10	0.23+/-0.10
K <sub>0</sub>	1.74+/-0.10	1.85+/-0.10	1.55+/-0.10	1.27+/-0.10	1.35+/-0.10

6) 剥离力检验 Peeling off force



① 盖带的剥离力：沿面胶移动方向拉时要求剥离力为 0.1N~0.7N。

Peeling force should be 0.1~0.7N pulling in the direction of arrow.

② 剥离速度：300mm/min

Speed of peeling off: 300mm/min.

③ 在胶带、纸带剥落时，面胶不能有破损，不能粘纸带。

The cover bond should not be damaged and bond the tape when it peeled off.

7) 包装数量 (单位: 粒) Packaging number (Unit: Pcs)

类型 SIZE	453215	451616	322513	321611	321609	201212	201209	160808	100505
每卷数量 REEL	3000	5000	3000	3000	4000	3000	4000	4000	10000
每盒数量 BOX	12000	20000	30000	30000	40000	30000	40000	40000	100000
每箱数量 CASE	36000	无	180000	180000	240000	180000	240000	240000	600000



## 8) 标签粘贴位置 Label stick station

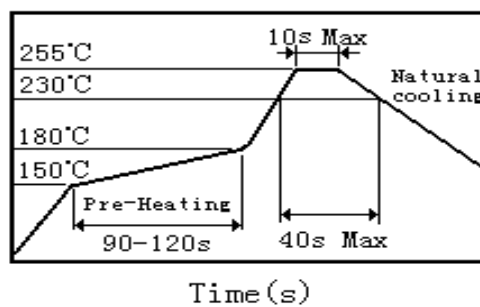
卷盘标签	纸盒标签	纸盒标签	外箱标签
			

## 7 推荐焊接条件 Recommend Soldering Conditions

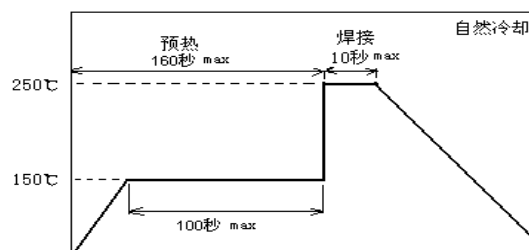
### ② 焊接要求 Soldering conditions

- 预热时，产品表温与焊料温度的温差最大不允许超出 150℃，焊接完冷却时，产品表温与溶剂温度之间的温差最大不超过 100℃。预热不足有可能引发产品表面裂纹，从而导致产品品质下降。
- Pre-heating should be in such a way that the temperature difference between solder and ferrite surface is limited to 150℃ max. Also cooling into solvent after soldering should be in such way that the temperature difference is limited to 100℃ max. Un-enough pre-heating may cause cracks on the ferrite, resulting in the deterioration of product quality.
- 产品要在以下画出的曲线允许的范围进行焊接。其它焊接条件可能引起产品电极的腐蚀。当焊接重复时，允许的时间为第一次做的累计时间。
- Products should be soldered within the following allowable range indicated by the slanted line. The excessive soldering conditions may cause the corrosion of the electrode. When soldering is repeated, allowable time is the accumulated time.

### 1) 回流焊曲线 Reflow soldering profile



### 2) 波峰焊曲线 Flow soldering profile



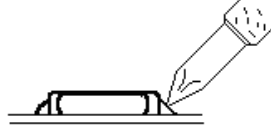


### 3) 手工焊接 Iron soldering

烙铁温度: 350°C Perform soldering at 350°C on 30W max

功率: 最大为 30W Time: < 5S

烙铁停留时间: < 5S (注意不要将烙铁碰到产品端电极) Take care not to apply the tip of the soldering iron to the terminal electrodes



## 8 清洗 Cleaning

### 1) 清洗条件 Cleaning Conditions

清洗温度: 60°C (最高) Cleaning temperature : 60°C max

清洗时间: 1 分钟 (最少) Cleaning time: 1 minute min.

超声波功率: 最大为 200W Ultrasonic output power: 200W max

## 9 存储要求 Storage Requirements

### 1) 存储期限 Storage period

距电感公司出厂检验时间 6 个月内, 产品可以使用检验时间可以通过包装外侧标记的检验号确认。若时间超过 6 个月, 应检查焊接性能后方可使用。

Products which inspected in INDUCTOR COMPANY over 6 months ago should be examined and used, which can be Confirmed with inspection No. marked on the container. Solder ability should be checked if this period is exceeded.

### 2) 存储条件 Storage conditions

(1) 存放货物的库房应满足以下条件: 温度: -10 ~ +40°C, 相对湿度: 30 ~ 70%。

(2) 禁止将产品保管在腐蚀性物质中, 如硫磺、氯气或酸, 否则将引起端头氧化, 导致降低焊接性。

(3) 为了避免受潮气、灰尘等物质的影响, 产品应保管于货架上。

(4) 产品保管在库房中, 应避免热冲击、振动以及直接光照等等。

(5) 产品应密封包装。

(1) Products should be storage in the warehouse on the following conditions:

Temperature : -10~+40°C Humidity: 30~70% relative humidity

(2) Don't keep products in corrosive gases such as sulfur, chlorine gas or acid , or it may case oxidization of Electrodes resulting in poor solder ability.

(3) Products should be storaged on the palette for the prevention of the influence from humidity, dust and so on.

(4) Products should be storaged in the warehouse without heat shock, vibration, direct sunlight and so on.

(5) Products should be storaged under the airtight packaged condition.



## 10 ODS（消耗臭氧层物质）的使用情况 Usage Of ODS

1) 对于以下所列物质，我公司在生产过程中绝不使用。

ODS: CCl<sub>4</sub>（四氯化碳）、HCFC 等。

For ODS listed below , we don't use in process.

ODS: CCl<sub>4</sub>, HCFC, etc.

## 11 注意事项 Notes

(1) 若本次承认的为“整体无铅”产品，则表明该产品符合 RoHS 指令的要求。

(2) 本承认书保证我司产品作为一个单体时的质量情况，当我司产品被安装到贵公司产品上时请保证贵司的产品已根据贵司的规范进行了有效评价和确认。

(3) 如果贵司对我司产品的试用已超过了本测试规范所界定的产品功能，对于此所引发的失效我司将不予保证。

(1) If the parcel label on product is "Unitary lead free" that indicate the products in accord with ROHS appointed requests.

(2) This product specification guarantees the quality of our product as a single unit, Please make sure that your product has been evaluated and confirmed against your specifications when our product is mounted to your product.

(3) We can't warrant against failure caused by any use of our product that deviates from the intended use as described in this product specification.

单击下面可查看定价，库存，交付和生命周期等信息

[>>FH\(风华高科\)](#)