

◆特征:

- 环氧树脂涂层,耐湿度,使用寿命长.
- 电感范围宽,设计紧凑体积小,重量轻
- 高 Q 和自我共振频率
- 编带包装可用于自动插件
- 符合 RoHS,无卤和 REACH

◆用途:

- 电视、个人电脑
- 收音机、电话
- 充电器,快充
- 其他各种电子产品

◆环境:

- 工作温度: -25°C 至 $+85^{\circ}\text{C}$
(包括线圈自身温升)

◆试验设备:

- 电感值:HP4284A, HP4285A 或同等仪器
- 电流:HP4284+42841A
- 自谐振频率: HM 9461
- 品质因子: HP4285A
- 直流电阻: Chroma 16502 或同等仪器

◆产品型号:

Features:

- Coating epoxy resin that ensure the humidity resistance to be long life
- Design to be compact, small and light-weight
- Wide range of inductance
- Contribute to be high Q and self-resonant frequencies
- Tape packaging for auto-insertion
- RoHS, Halogen Free and REACH Compliance

Applications:

- Televisions, personal computers
- Radios, telephones
- Charger, fast charge
- Other various electronic products

Environmental Data:

- Operating Temperature: -25°C to $+85^{\circ}\text{C}$
(Including coils self-temperature rise)

Test Equipment:

- L:HP4284A or HP4285A LCR meter or equivalent
- Isat & Irms: HP4284+42841A
- SRF: HM 9461
- Q: HP4285A
- DCR:Chroma 16502 or equivalent

Product Identification:

①	②	③	④	⑤
EC	0410	100	K	I
①	类型 Type			
EC	轴向固定电感 Axial Fixed Inductors			I

②
外形尺寸(L×W×H) (mm) External Dimensions (L×H) (mm)
0410 4.0×10.5

③
Inductance
10 uH

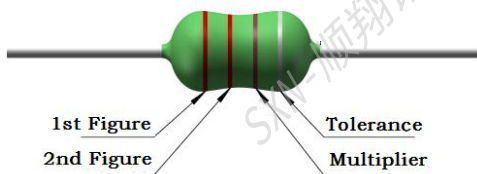
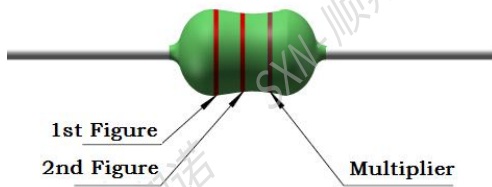
④
公差 Inductance Tolerance
J:±5%,K: ±10%, L: ±15% M: ±20%,P: ±25%, N: ±30%

⑤
包装 Packing
B 散装 Bulk Package
T 编带 Tape

颜色编码:

Color Coding:

The nominal inductance is marked. Color code listed in table below. 标称电感值用色码编码表示如下表所示。

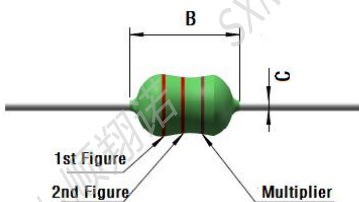


Color 颜色	Nominal Inductance(uH)标称电感值(微亨)			
	1st Figure	2nd Figure	Multiplier	Tolerance
Black 黑	0		x1	±20%
Brown 棕	1		x10	
Red 红	2		x100	
Orange 橙	3		x1000	
Yellow 黄	4			
Green 绿	5			
Blue 蓝	6			
Violet 紫	7			
Gray 灰	8			
White 白	9			
Gold 金			x0.1	±5%
Silver 银			x0.01	±10%

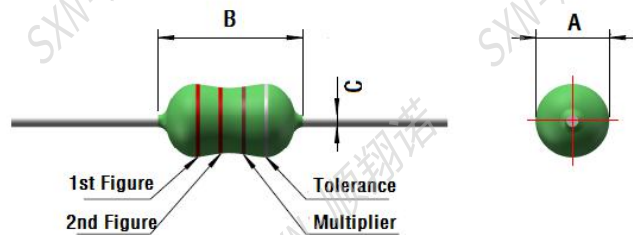
外观尺寸:

Shape and Dimensions(dimensions are in mm):

F1



F2



Part No	ITEM			
	Figure	A	B	C
EC0204	F1	Ø2.8 Max	4.8 Max	Ø0.45 ± 0.1
EC0307	F2	Ø3.0/ Ø3.2 Max	7.62 Max	Ø0.50 ± 0.1
EC0410	F2	Ø4.0 Max	10.5 Max	Ø0.60 ± 0.1
EC0412	F2	Ø4.8/ Ø5.0 Max	12.7 Max	Ø0.65 ± 0.1
EC0510	F2	Ø5.0 Max	11.0 Max	Ø0.60 ± 0.1
EC0512	F2	Ø5.0 Max	12.0 Max	Ø0.60 ± 0.1
EC0514	F2	Ø5.0/ Ø5.5 Max	15.0 Max	Ø0.65 ± 0.1

◆规格特性:

Specifications:

● EC0204 Series Electrical Characteristics (Electrical specifications at 25°C)

Part No	Inductance		Q	L/Q	SRF	DCR	Rated Current
	L(μH) '@1KHz	Tole	Min	Test Freq.	(MHz) Min	(Ω) Max	(mA) Max
EC0204-1R0K	1.0	±10%	35	25.2MHZ	150	0.8	270
EC0204-1R2K	1.2	±10%	40	7.96MHZ	110	0.9	260
EC0204-1R5K	1.5	±10%	40	7.96MHZ	80	1.0	250
EC0204-1R8K	1.8	±10%	40	7.96MHZ	60	1.1	240
EC0204-2R2K	2.2	±10%	40	7.96MHZ	45	1.2	230
EC0204-2R7K	2.7	±10%	40	7.96MHZ	40	1.3	220
EC0204-3R3K	3.3	±10%	40	7.96MHZ	38	1.4	210
EC0204-3R9K	3.9	±10%	40	7.96MHZ	36	1.5	200
EC0204-4R7K	4.7	±10%	40	7.96MHZ	32	1.7	190
EC0204-5R6K	5.6	±10%	40	7.96MHZ	30	1.9	180
EC0204-6R8K	6.8	±10%	40	7.96MHZ	28	2.0	175
EC0204-8R2K	8.2	±10%	40	7.96MHZ	26	2.2	165
EC0204-100K	10	±10%	40	7.96MHZ	24	2.5	160
EC0204-120K	12	±10%	40	2.52MHZ	22	2.5	150
EC0204-150K	15	±10%	40	2.52MHZ	20	2.5	145
EC0204-180K	18	±10%	40	2.52MHZ	18	3.1	140
EC0204-220K	22	±10%	40	2.52MHZ	17	3.4	130
EC0204-270K	27	±10%	40	2.52MHZ	16	4.3	80
EC0204-330K	33	±10%	40	2.52MHZ	14	4.7	76
EC0204-390K	39	±10%	40	2.52MHZ	13	5.2	74
EC0204-470K	47	±10%	40	2.52MHZ	12	5.8	70
EC0204-560K	56	±10%	40	2.52MHZ	11	6.4	68
EC0204-680K	68	±10%	40	2.52MHZ	10	7.2	64
EC0204-820K	82	±10%	40	2.52MHZ	9.5	11.0	46
EC0204-101K	100	±10%	40	2.52MHZ	9.0	12.0	44
EC22W-121K	120	±10%	40	0.796 MHZ	8.0	13.0	42
EC22W-151K	150	±10%	40	0.796 MHZ	6.0	16.0	39
EC22W-181K	180	±10%	40	0.796 MHZ	5.5	18.0	37
EC22W-221K	220	±10%	40	0.796 MHZ	4.5	20.0	35
EC22W-271K	270	±10%	30	0.796 MHZ	3.5	20.0	25
EC22W-331K	330	±10%	30	0.796 MHZ	3.0	20.0	25

• EC0307 Series Electrical Characteristics (Electrical specifications at 25°C)

Part No	Inductance		Q	L/Q	SRF	DCR	Rated Current
	L(μH)	Tole	Min	Test Freq.	(MHz) Min	(Ω) Max	(mA) Max
EC0307-1R0K	1.0	±10%	40	25.2MHZ	150	0.15	740
EC0307-1R2K	1.2	±10%	40	7.96MHZ	150	0.18	740
EC0307-1R5K	1.5	±10%	40	7.96MHZ	150	0.20	700
EC0307-1R8K	1.8	±10%	50	7.96MHZ	125	0.23	655
EC0307-2R2K	2.2	±10%	50	7.96MHZ	110	0.27	630
EC0307-2R7K	2.7	±10%	50	7.96MHZ	95	0.28	595
EC0307-3R3K	3.3	±10%	50	7.96MHZ	70	0.30	575
EC0307-3R9K	3.9	±10%	50	7.96MHZ	65	0.32	555
EC0307-4R7K	4.7	±10%	50	7.96MHZ	36	0.35	530
EC0307-5R6K	5.6	±10%	50	7.96MHZ	32	0.40	500
EC0307-6R8K	6.8	±10%	50	7.96MHZ	28	0.48	470
EC0307-8R2K	8.2	±10%	50	7.96MHZ	23	0.56	425
EC0307-100K	10	±10%	50	7.96MHZ	18	0.75	370
EC0307-120K	12	±10%	50	2.52MHZ	17	0.80	350
EC0307-150K	15	±10%	50	2.52MHZ	16	0.93	335
EC0307-180K	18	±10%	50	2.52MHZ	15	1.00	315
EC0307-220K	22	±10%	50	2.52MHZ	13	1.20	285
EC0307-270K	27	±10%	50	2.52MHZ	11	1.80	270
EC0307-330K	33	±10%	50	2.52MHZ	10	2.10	255
EC0307-390K	39	±10%	50	2.52MHZ	9.5	2.30	240
EC0307-470K	47	±10%	50	2.52MHZ	8.5	2.60	205
EC0307-560K	56	±10%	50	2.52MHZ	7.5	2.90	195
EC0307-680K	68	±10%	50	2.52MHZ	6.5	3.30	185
EC0307-820K	82	±10%	50	2.52MHZ	6.0	3.80	175
EC0307-101K	100	±10%	50	2.52MHZ	5.5	4.20	165
EC0307-121K	120	±10%	50	0.796 MHZ	5.4	4.70	160
EC0307-151K	150	±10%	50	0.796 MHZ	4.7	5.40	150
EC0307-181K	180	±10%	50	0.796 MHZ	4.3	6.00	140
EC0307-221K	220	±10%	60	0.796 MHZ	4.0	7.00	130
EC0307-271K	270	±10%	60	0.796 MHZ	3.7	7.70	120
EC0307-331K	330	±10%	60	0.796 MHZ	3.4	11.10	100
EC0307-391K	390	±10%	60	0.796 MHZ	2.8	12.60	95
EC0307-471K	470	±10%	60	0.796 MHZ	2.5	14.00	90
EC0307-561K	560	±10%	60	0.796 MHZ	2.3	15.50	85
EC0307-681K	680	±10%	60	0.796 MHZ	2.0	25.30	75
EC0307-821K	820	±10%	60	0.796 MHZ	1.5	27.50	65
EC0307-102K	1000	±10%	50	0.796 MHZ	1.2	31.40	60

● EC0410 Series Electrical Characteristics (Electrical specifications at 25℃)

Part No	Inductance		Q	L/Q	SRF	DCR	Rated Current
	L(μH)	Tole	Min	Test Freq.	(MHz) Min	(Ω) Max	(mA) Max
EC0410-1R0K	1.0	±10%	45	25.2MHZ	157	0.17	920
EC0410-1R2K	1.2	±10%	50	7.96MHZ	144	0.18	880
EC0410-1R5K	1.5	±10%	50	7.96MHZ	131	0.20	830
EC0410-1R8K	1.8	±10%	55	7.96MHZ	121	0.22	790
EC0410-2R2K	2.2	±10%	55	7.96MHZ	110	0.24	750
EC0410-2R7K	2.7	±10%	60	7.96MHZ	100	0.25	720
EC0410-3R3K	3.3	±10%	65	7.96MHZ	94	0.30	670
EC0410-3R9K	3.9	±10%	65	7.96MHZ	86	0.35	640
EC0410-4R7K	4.7	±10%	70	7.96MHZ	80	0.40	620
EC0410-5R6K	5.6	±10%	70	7.96MHZ	74	0.43	590
EC0410-6R8K	6.8	±10%	75	7.96MHZ	58	0.48	550
EC0410-8R2K	8.2	±10%	80	7.96MHZ	53	0.52	530
EC0410-100K	10	±10%	80	7.96MHZ	45	0.58	500
EC0410-120K	12	±10%	75	2.52MHZ	30	0.63	480
EC0410-150K	15	±10%	70	2.52MHZ	20	0.72	460
EC0410-180K	18	±10%	70	2.52MHZ	14	0.77	430
EC0410-220K	22	±10%	50	2.52MHZ	9.9	0.84	410
EC0410-270K	27	±10%	50	2.52MHZ	7.6	0.94	390
EC0410-330K	33	±10%	50	2.52MHZ	6.3	1.03	370
EC0410-390K	39	±10%	50	2.52MHZ	6.3	1.12	350
EC0410-470K	47	±10%	45	2.52MHZ	6.3	1.22	340
EC0410-560K	56	±10%	40	2.52MHZ	6.2	1.34	320
EC0410-680K	68	±10%	40	2.52MHZ	5.7	1.47	305
EC0410-820K	82	±10%	35	2.52MHZ	4.3	1.62	290
EC0410-101K	100	±10%	30	2.52MHZ	4.8	1.80	275
EC0410-121K	120	±10%	70	0.796 MHZ	3.8	3.00	185
EC0410-151K	150	±10%	70	0.796 MHZ	3.5	4.20	175
EC0410-181K	180	±10%	70	0.796 MHZ	3.3	4.60	165
EC0410-221K	220	±10%	70	0.796 MHZ	3.0	5.10	155
EC0410-271K	270	±10%	65	0.796 MHZ	2.8	6.00	145
EC0410-331K	330	±10%	65	0.796 MHZ	2.6	6.40	137
EC0410-391K	390	±10%	65	0.796 MHZ	2.4	7.00	133
EC0410-471K	470	±10%	60	0.796 MHZ	2.25	7.70	126
EC0410-561K	560	±10%	60	0.796 MHZ	2.10	8.50	120
EC0410-681K	680	±10%	55	0.796 MHZ	1.95	9.40	113
EC0410-821K	820	±10%	55	0.796 MHZ	1.85	12.00	105
EC0410-102K	1000	±10%	50	0.796 MHZ	1.40	17.40	100

● EC0412 Series Electrical Characteristics (Electrical specifications at 25°C)

Part No	Inductance		L Test Freq.	SRF (MHz) Min	DCR (Ω) Max	Saturation Current (mA) Max	Temperature Rise Current (mA) Max
	L(μH)	Tole					
EC0412-1R0K	1.0	±10%	7.96MHZ	190	0.018	3000	3300
EC0412-1R2K	1.2	±10%	7.96MHZ	170	0.019	2700	3200
EC0412-1R5K	1.5	±10%	7.96MHZ	160	0.020	2500	3100
EC0412-1R8K	1.8	±10%	7.96MHZ	150	0.023	2100	2900
EC0412-2R2K	2.2	±10%	7.96MHZ	130	0.031	2000	2600
EC0412-2R7K	2.7	±10%	7.96MHZ	120	0.033	1900	2500
EC0412-3R3K	3.3	±10%	7.96MHZ	110	0.054	1700	1900
EC0412-3R9K	3.9	±10%	7.96MHZ	100	0.060	1500	1800
EC0412-4R7K	4.7	±10%	7.96MHZ	86	0.068	1400	1700
EC0412-5R6K	5.6	±10%	7.96MHZ	64	0.074	1300	1600
EC0412-6R8K	6.8	±10%	7.96MHZ	44	0.080	1200	1600
EC0412-8R2K	8.2	±10%	7.96MHZ	32	0.087	1100	1500
EC0412-100K	10	±10%	1KHZ	25	0.095	970	1500
EC0412-120K	12	±10%	1KHZ	17	0.11	880	1400
EC0412-150K	15	±10%	1KHZ	13	0.15	790	1200
EC0412-180K	18	±10%	1KHZ	10	0.16	710	1100
EC0412-220K	22	±10%	1KHZ	8.4	0.19	640	1000
EC0412-270K	27	±10%	1KHZ	8.0	0.22	580	950
EC0412-330K	33	±10%	1KHZ	7.6	0.24	530	910
EC0412-390K	39	±10%	1KHZ	7.1	0.26	480	880
EC0412-470K	47	±10%	1KHZ	6.0	0.35	430	760
EC0412-560K	56	±10%	1KHZ	5.8	0.47	400	650
EC0412-680K	68	±10%	1KHZ	4.3	0.53	370	610
EC0412-820K	82	±10%	1KHZ	4.1	0.60	330	580
EC0412-101K	100	±10%	1KHZ	3.9	0.67	300	550
EC0412-121K	120	±10%	1KHZ	3.60	0.90	270	470
EC0412-151K	150	±10%	1KHZ	3.20	1.20	250	410
EC0412-181K	180	±10%	1KHZ	2.80	1.40	220	380
EC0412-221K	220	±10%	1KHZ	2.30	1.90	200	320
EC0412-271K	270	±10%	1KHZ	2.10	2.10	180	310
EC0412-331K	330	±10%	1KHZ	1.90	2.40	170	290
EC0412-391K	390	±10%	1KHZ	1.70	3.00	150	260
EC0412-471K	470	±10%	1KHZ	1.40	3.40	140	240
EC0412-561K	560	±10%	1KHZ	1.30	4.70	130	210
EC0412-681K	680	±10%	1KHZ	1.20	6.40	110	180
EC0412-821K	820	±10%	1KHZ	1.10	7.10	100	170
EC0412-102K	1000	±10%	1KHZ	1.00	7.90	95	160
EC0412-122K	1200	±10%	1KHZ	0.94	9.00	87	150
EC0412-152K	1500	±10%	1KHZ	0.76	12.00	78	130

Part No	Inductance		L Test Freq.	SRF (MHz) Min	DCR (Ω) Max	Saturation Current (mA) Max	Temperature Rise Current (mA) Max
	L(μ H)	Tole					
EC0412-182K	1800	$\pm 10\%$	1KHZ	0.72	14.00	71	120
EC0412-222K	2200	$\pm 10\%$	1KHZ	0.64	19.00	64	100
EC0412-272K	2700	$\pm 10\%$	1KHZ	0.56	25.00	58	90
EC0412-332K	3300	$\pm 10\%$	1KHZ	0.53	29.00	52	83
EC0412-392K	3900	$\pm 10\%$	1KHZ	0.48	34.00	48	77
EC0412-472K	4700	$\pm 10\%$	1KHZ	0.45	37.00	44	74
EC0412-562K	5600	$\pm 10\%$	1KHZ	0.40	50.00	40	63
EC0412-682K	6800	$\pm 10\%$	1KHZ	0.36	58.00	36	59
EC0412-822K	8200	$\pm 10\%$	1KHZ	0.29	68.00	33	54
EC0412-103K	10000	$\pm 10\%$	1KHZ	0.27	75.00	30	52

● EC0510 Series Electrical Characteristics (Electrical specifications at 25°C)

Part No	Inductance		Q Min	Q Test Freq.	SRF (MHz) Min	DCR (Ω) Max	Rated Current (mA) Max
	@ 1KHz L(mH)	Tole					
EC0510-4R7K	4.7	$\pm 10\%$	20	7.96MHZ	50	0.06	900
EC0510-100K	10	$\pm 10\%$	15	7.96MHZ	30	0.45	750
EC0510-220K	22	$\pm 10\%$	30	2.52 MHZ	8.0	0.65	450
EC0510-820K	82	$\pm 10\%$	20	2.52 MHZ	3.8	0.82	330
EC0510-101K	100	$\pm 10\%$	20	2.52 MHZ	3.5	0.75	300
EC0510-121K	120	$\pm 10\%$	20	0.796 MHZ	3.3	1.20	250
EC0510-151K	150	$\pm 10\%$	20	0.796 MHZ	3.2	1.80	225
EC0510-181K	180	$\pm 10\%$	20	0.796 MHZ	2.8	2.00	200
EC0510-221K	220	$\pm 10\%$	30	0.796 MHZ	2.6	2.10	180
EC0510-271K	270	$\pm 10\%$	30	0.796 MHZ	2.4	2.50	170
EC0510-331K	330	$\pm 10\%$	30	0.796 MHZ	2.2	3.00	160
EC0510-391K	390	$\pm 10\%$	3030	0.796 MHZ	2.0	3.50	150
EC0510-471K	470	$\pm 10\%$	30	0.796 MHZ	1.9	4.00	140
EC0510-561K	560	$\pm 10\%$	30	0.796 MHZ	1.8	5.40	130
EC0510-681K	680	$\pm 10\%$	40	0.796 MHZ	1.5	6.00	120
EC0510-821K	820	$\pm 10\%$	50	0.796 MHZ	1.2	7.50	110
EC0510-102K	1000	$\pm 10\%$	50	0.252 MHZ	1.0	8.00	100
EC0510-122K	1200	$\pm 10\%$	60	0.252 MHZ	0.95	14.50	95
EC0510-152K	1500	$\pm 10\%$	60	0.252 MHZ	0.9	16.50	90
EC0510-182K	1800	$\pm 10\%$	60	0.252 MHZ	0.9	19.00	85
EC0510-222K	2200	$\pm 10\%$	60	0.252 MHZ	0.8	27.50	80
EC0510-272K	2700	$\pm 10\%$	60	0.252 MHZ	0.75	40.00	75
EC0510-332K	3300	$\pm 10\%$	50	0.252 MHZ	0.7	50.00	62
EC0510-392K	3900	$\pm 10\%$	50	0.252 MHZ	0.65	53.00	59

Part No	Inductance		Q	Q	SRF	DCR	Rated Current
	@ 1KHz L(uH)	Tole	Min	Test Freq.	(MHz) Min	(Ω) Max	(mA) Max
EC0510-472K	4700	±10%	50	0.252 MHZ	0.6	60.00	55
EC0510-562K	5600	±10%	50	0.252 MHZ	0.5	64.00	40
EC0510-682K	6800	±10%	50	0.252 MHZ	0.45	73.00	35
EC0510-822K	8200	±10%	30	0.252 MHZ	0.4	80.00	30
EC0510-103K	10000	±10%	25	79.6 KHZ	0.35	132.00	25
EC0510-123K	12000	±10%	25	79.6 KHZ	0.3	143.00	20
EC0510-153K	15000	±10%	25	79.6 KHZ	0.25	166.00	18
EC0510-183K	18000	±10%	25	79.6 KHZ	0.2	185.00	15
EC0510-223K	22000	±10%	20	79.6 KHZ	0.15	330.00	12
EC0510-273K	27000	±10%	20	79.6 KHZ	0.1	370.00	10
EC0510-333K	33000	±10%	40	79.6 KHZ	0.25	240.00	10

● EC0512 Series Electrical Characteristics (Electrical specifications at 25℃)

Part No	Inductance		Q	Q	SRF	DCR	Rated Current
	@ 1KHz L(uH)	Tole	Min	Test Freq.	(MHz) Min	(Ω) Max	(mA) Max
EC0512-221K	220	±10%	10	0.796 MHZ	2.6	2.1	160
EC0512-331K	330	±10%	30	0.796 MHZ	2.2	2.5	130
EC0512-391K	390	±10%	30	0.796 MHZ	2.0	2.8	125
EC0512-471K	470	±10%	30	0.796 MHZ	1.9	3.0	120
EC0512-561K	560	±10%	30	0.796 MHZ	1.8	4.5	115
EC0512-681K	680	±10%	30	0.796 MHZ	1.5	4.6	110
EC0512-821K	820	±10%	30	0.796 MHZ	1.2	5.0	105
EC0512-102K	1000	±10%	50	0.252 MHZ	1.0	5.0	100
EC0512-122K	1200	±10%	60	0.252 MHZ	0.95	14.5	90
EC0512-152K	1500	±10%	60	0.252 MHZ	0.9	16.5	85
EC0512-182K	1800	±10%	60	0.252 MHZ	0.9	19.0	80
EC0512-222K	2200	±10%	60	0.252 MHZ	0.8	27.5	70
EC0512-272K	2700	±10%	60	0.252 MHZ	0.75	40.0	65
EC0512-332K	3300	±10%	50	0.252 MHZ	0.7	50.0	60
EC0512-392K	2900	±10%	50	0.252 MHZ	0.65	53.0	55
EC0512-472K	4700	±10%	50	0.252 MHZ	0.6	60.0	50
EC0512-562K	5600	±10%	50	0.252 MHZ	0.5	64.0	45
EC0512-682K	6800	±10%	40	0.252 MHZ	0.45	73.0	40
EC0512-822K	8200	±10%	30	0.252 MHZ	0.4	80.0	30
EC0512-103K	10000	±10%	30	79.6 KHZ	0.35	132.0	25

● EC0514 Series Electrical Characteristics (Electrical specifications at 25℃)

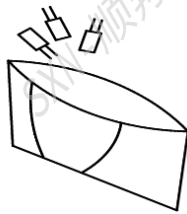
Part No	Inductance		Q	L/Q	SRF	DCR	Saturation Current (mA) Max	Temperature Rise Current (mA) Max
	L(μH)	Tole	Min	Test Freq.	(MHz) Min	(Ω) Max		
EC0514-1R0M	1.0	±10%	10	2.52MHZ	300	0.022	5600	3800
EC0514-1R2M	1.2	±10%	10	2.52MHZ	260	0.024	5500	3700
EC0514-1R5M	1.5	±10%	10	2.52MHZ	250	0.026	5000	3600
EC0514-1R8M	1.8	±10%	10	2.52MHZ	240	0.029	4700	3100
EC0514-2R2M	2.2	±10%	10	2.52MHZ	220	0.031	4500	2900
EC0514-2R7M	2.7	±10%	10	2.52MHZ	195	0.034	4000	2700
EC0514-3R3M	3.3	±10%	10	2.52MHZ	155	0.038	3400	2600
EC0514-3R9M	3.9	±10%	10	2.52MHZ	115	0.040	3100	2500
EC0514-4R7K	4.7	±10%	10	2.52MHZ	85	0.044	2800	2400
EC0514-5R6K	5.6	±10%	10	2.52MHZ	55	0.048	2600	2100
EC0514-6R8K	6.8	±10%	10	2.52MHZ	50	0.051	2400	2000
EC0514-8R2K	8.2	±10%	10	2.52MHZ	38	0.056	2200	1950
EC0514-100K	10	±10%	10	2.52MHZ	24	0.062	2100	1900
EC0514-120K	12	±10%	10	2.52MHZ	18	0.076	1800	1800
EC0514-150K	15	±10%	10	2.52MHZ	16	0.088	1700	1700
EC0514-180K	18	±10%	10	2.52MHZ	15	0.11	1600	1600
EC0514-220K	22	±10%	10	2.52MHZ	14	0.13	1400	1550
EC0514-270K	27	±10%	10	2.52MHZ	13	0.14	1300	1300
EC0514-330K	33	±10%	10	2.52MHZ	11	0.20	1200	1200
EC0514-390K	39	±10%	10	2.52MHZ	10	0.22	1100	1000
EC0514-430K	43	±10%	10	2.52MHZ	9.5	0.28	1000	950
EC0514-470K	47	±10%	10	2.52MHZ	9.5	0.28	1000	950
EC0514-560K	56	±10%	10	2.52MHZ	8.0	0.30	900	900
EC0514-680K	68	±10%	10	2.52MHZ	7.5	0.34	800	800
EC0514-820K	82	±10%	10	2.52MHZ	7.0	0.385	700	750
EC0514-101K	100	±10%	10	2.52MHZ	6.5	0.480	700	700
EC0514-121K	120	±10%	15	0.796 MHZ	5.0	0.595	600	600
EC0514-151K	150	±10%	15	0.796 MHZ	4.5	0.90	550	500
EC0514-181K	180	±10%	15	0.796 MHZ	4.0	1.10	500	400
EC0514-221K	220	±10%	15	0.796 MHZ	3.8	1.25	440	390
EC0514-271K	270	±10%	15	0.796 MHZ	3.5	1.85	420	330
EC0514-331K	330	±10%	15	0.796 MHZ	3.0	2.10	380	310
EC0514-391K	390	±10%	15	0.796 MHZ	2.8	2.28	340	300
EC0514-471K	470	±10%	15	0.796 MHZ	2.5	3.22	320	280
EC0514-561K	560	±10%	15	0.796 MHZ	2.2	3.85	290	270
EC0514-681K	680	±10%	15	0.796 MHZ	2.1	4.0	260	240
EC0514-821K	820	±10%	15	0.796 MHZ	2.0	5.0	250	230
EC0514-102K	1000	±10%	15	0.796 MHZ	1.8	5.8	240	190

Part No	Inductance		Q	L/Q	SRF	DCR	Saturation Current (mA) Max	Temperature Rise Current (mA) Max
	L(μH)	Tole	Min	Test Freq.	(MHz) Min	(Ω) Max		
EC0514-122K	1200	±10%	15	0.252MHZ	1.6	7.1	200	180
EC0514-152K	1500	±10%	15	0.252MHZ	1.5	7.8	190	170
EC0514-472K	4700	±10%	15	0.252MHZ	0.7	30	120	100

- Saturation Current: DC current at which inductance drops 10% from its value without current.
- Temperature Rise Current: the actual value of DC current when the temperature rise is $\Delta T 40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$).
- Rated DC Current: The less value which is Isat or Irms.

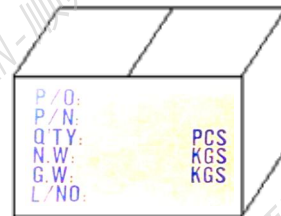
◆产品包装:

- In bag pakeage(B 散装)



PE 袋

Packaging:

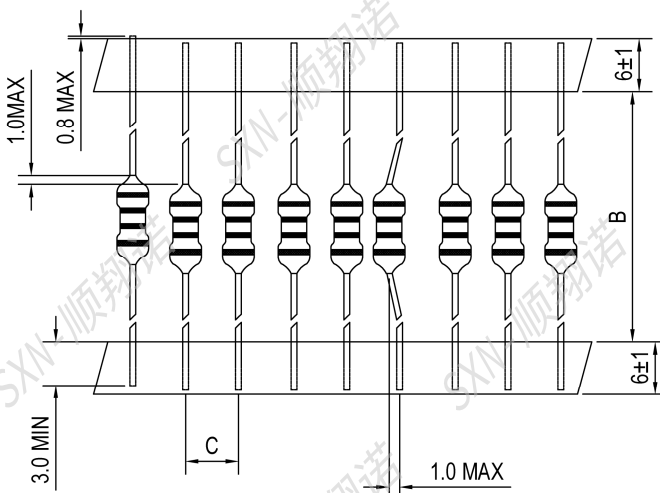


Outside Carton

不足整箱用内盒或填充物装满

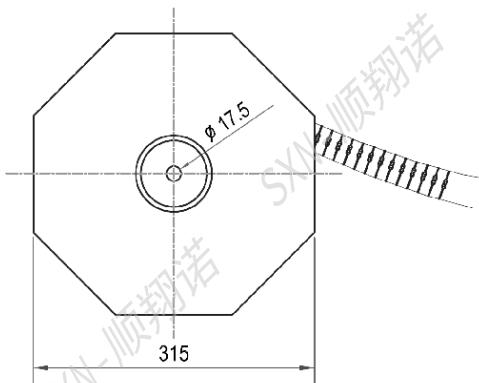
Part No.	PE 胶袋每袋数量	外箱
EC0204	1000PCS	20,000PCS
EC0307	1000PCS	20,000PCS
EC0410	1000PCS	20,000PCS
EC0412	1000PCS	20,000PCS
EC0510	500PCS	10,000PCS
EC0512	500PCS	10,000PCS
EC0514	500PCS	10,000PCS

- Tape Specifications (mm) 编带尺寸

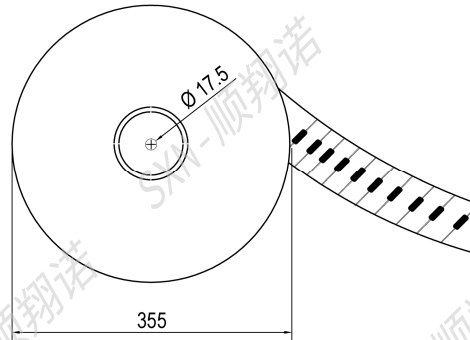


	T5	IF OD<5: TAPE WITH T5
B	52±1.0	
C	5.0±0.5	

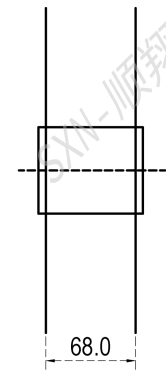
• Tape Specifications for T5 (mm)



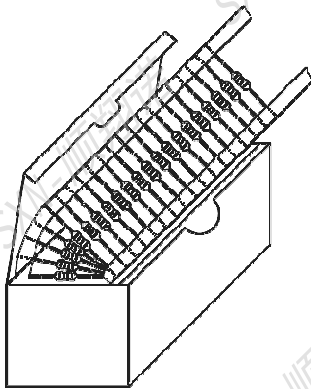
EC0204 / EC0307 REEL



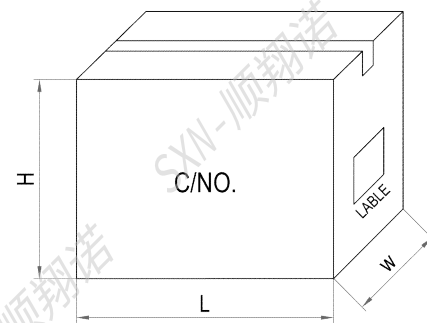
EC0410/ EC0412/EC0512/EC0514



• Tape Specifications for T5A (mm) 直脚编带盒装，产品常规包装方式



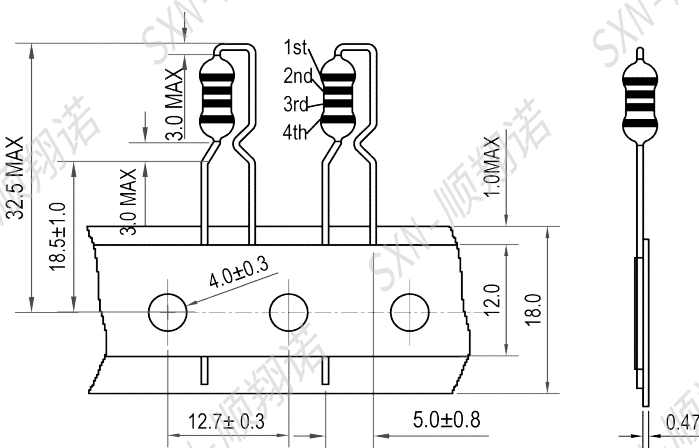
INSIDE BOX



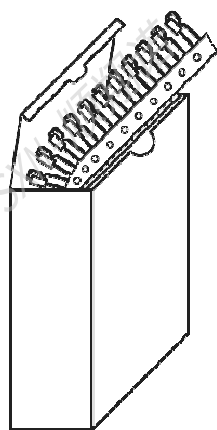
Outside Carton

不足整箱用内盒或填充物装满

• Packaging specification for TF1/2 (mm)



TF1 TYPE



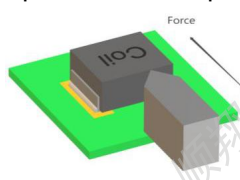
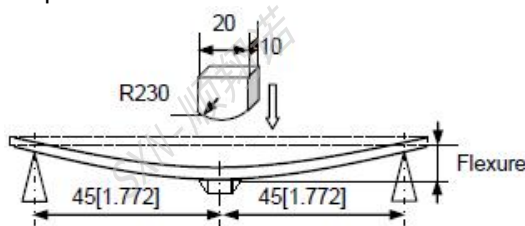
A 3D perspective diagram of a rectangular box. The front face is a large rectangle with the text "C/NO." centered on it. The side face is a smaller rectangle with the text "TABLE" centered on it. Dimension lines indicate the length, width, and height of the box. The length is labeled "L" at the bottom, the width is labeled "W" on the right side, and the height is labeled "H" on the left side. The box is shown from an isometric perspective, with the top, front, and right side visible.

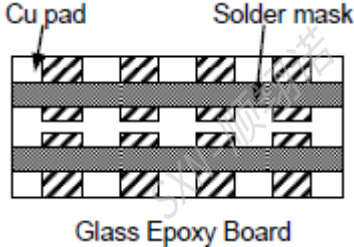
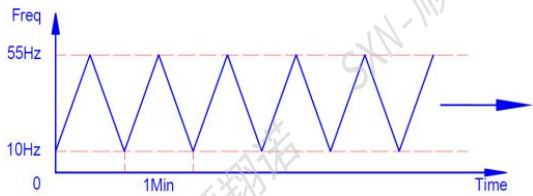
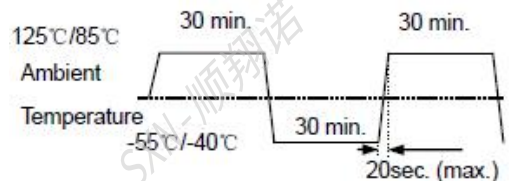
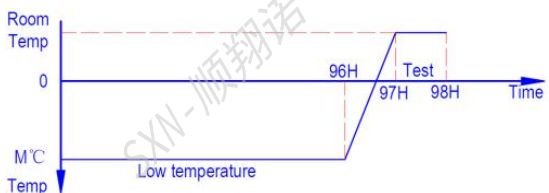
不足整箱用内盒或填充物装满

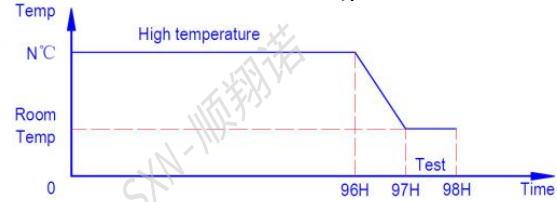
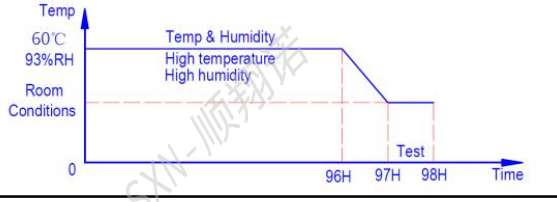
Series	Type	Packaging Quantity(pcs)			Carton Size(mm)		
		Parts/Box	Parts/Reel	Parts/Carton	L	W	H
EC0204	T5		5000	25,000	380	380	460
	T5A	3000		54,000	468	278	267
	TF	3000		30,000	550	345	265
EC0307	T5		5000	25,000	380	380	460
	T5A	2500		45,000	468	278	267
	TF	3000		30,000	550	345	265
EC0410	T5		5000	25000	380	380	460
	T5A	1500		27,000	468	278	267
	TF	3000		30,00	550	345	265
EC0412	T5		4000	20000	380	380	460
	T5A	1000		18,000	468	278	267
	TF	2500		25,000	550	345	265
EC0510	T5		3000	15,000	380	380	460
	T5A	1000		18,000	468	278	267
	TF	2500		25,000	550	345	265
EC0512	T5		3000	15,000	380	380	460
	T5A	1000		18,000	468	278	267
EC0514	T5		3000	15,000	380	380	460
	T5A	1000		18,000	468	278	267

◆可靠性测试:

Reliability Testing:

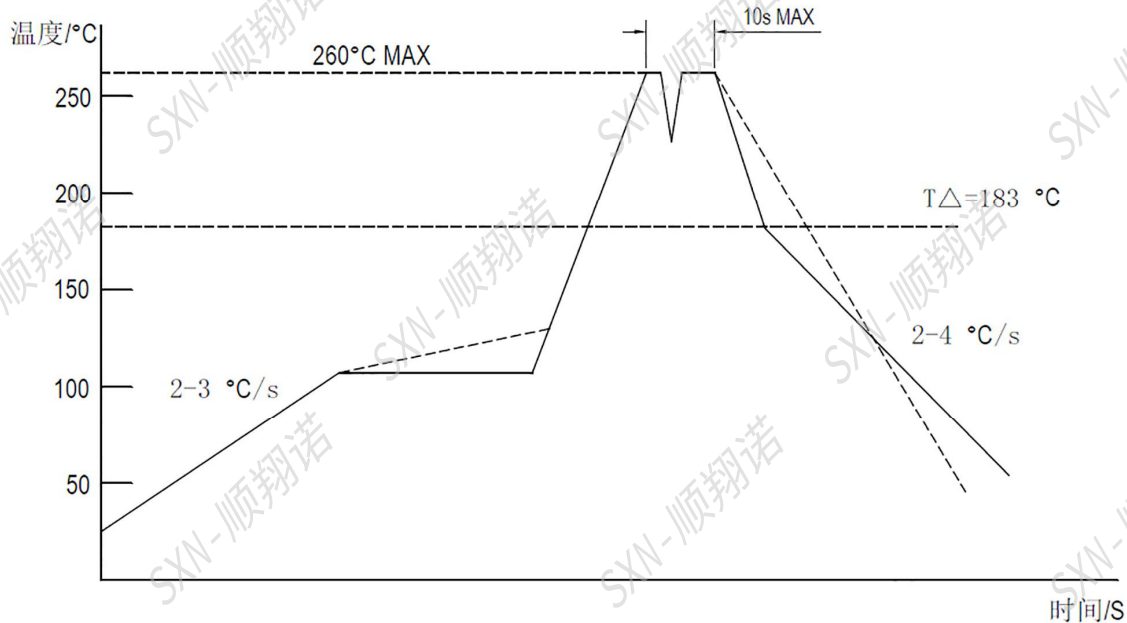
Items	Requirements	Test Methods and Remarks
Terminal Strength Reference documents: GB/T 2423.60-2008 端子强度(SMT)	1. Pulling test: Define: A: sectional area of terminal $A \leq 8\text{mm}^2$ force $\geq 5\text{N}$ time: 30sec $8\text{mm}^2 < A \leq 20\text{mm}^2$ force $\geq 10\text{N}$ time: 10sec $20\text{mm}^2 < A$ force $\geq 20\text{N}$ time: 10sec 2. Solder paste thickness: 0.12mm 3. Meet the above requirements without any loose terminal	Solder the inductor to the testing jig using leadfree solder. Then apply a force in the Keep time: $10 \pm 1\text{s}$ Speed: 1.0mm/s. 
Terminal Strength Reference documents: GB/T 2423.60-2008 端子强度(DIP)	1. Terminal diameter(d) mm $0.35 < d \leq 0.50$ Applied force: 5N Duration: 10sec 2. Terminal diameter(d) mm $0.50 < d \leq 0.80$ Applied force: 10N Duration: 10sec 3. Terminal diameter(d) mm $0.80 < d \leq 1.25$ Applied force: 20N Duration: 10sec 4. Terminal diameter(d) mm $D > 1.25$ Applied force: 40N Duration: 10sec 5. Meet the above requirements without any loose terminal.	Pull Force: the force shall be applied gradually to the terminal and then maintained for 10 seconds. 
Resistance to Flexure JIS C 5321:1997 抗弯曲性试验	1. No visible mechanical damage.	1. Solder the inductor to the test jig (glass epoxy board) 2. shown in Using a leadfree solder. Then apply a force in the direction shown 3. Flexure: 2mm. 4. Pressurizing Speed: 0.5mm/sec. 5. Keep time: 30 sec. 
Dropping Reference documents: GB/T 2423.7-2018 落下试验	1. No case deformation or change in appearance. 2. No short and no open.	1. Drop the packaged products from 1m high in 1 angle, 3 ridges and 6 surfaces, twice in each direction.
Solderability Reference documents: GB/T 2423.28-2005 可焊性试验	1. No visible mechanical damage. 2. Wetting shall exceed 75% coverage for 3. Terminals must have 95% minimum solder coverage	1. Solder temperture: $240 \pm 2^\circ\text{C}$ 2. Duration: 3 sec. 3. Solder: Sn/3.0Ag/0.5Cu. 4. Flux: 25% Resin and 75% ethanol in weight

Items	Requirements	Test Methods and Remarks
Vibration Reference documents: GB/T 2423.10-2019 振動試驗	1.No visible mechanical damage. 2. Inductance change: Within $\pm 10\%$. 3.Q factor change: Within $\pm 20\%$. 	1.Solder the inductor to the testing jig (glass epoxy board shown in) using leadfree solder. 2.The inductor shall be subjected to a simple harmonic motion having total amplitude of 1.5mm, the frequency being varied uniformly between the approximate limits of 10 and 55 Hz. 3.The frequency range from 10 to 55 Hz and return to 10 Hz shall be traversed in approximately 1 minute. This motion shall be applied for a period of 2 hours in each 3 mutually perpendicular directions (total of 6 hours). 
Thermal Shock Reference documents: GB/T 2423.22-2012 Method Na 冷热冲击试验	1.No visible mechanical damage. 2. Inductance change: Within $\pm 10\%$. (Mn-Zn: Within $\leq 30\%$) 3.Q factor change: Within $\pm 20\%$.	1.Start at (85~125℃) for T time, rush to (-55~-40℃) for T time as one cycle, go through 100 cycles. 2.Transforming interval: Max. 20 sec. 3.Tested cycle: 100 cycles. 4.The chip shall be stabilized at normal condition for 1~2 hours 
Low temperature Storage Reference documents: GB/T 2423.1-2008 Method Ab 低温储存试验	1.No visible mechanical damage. 2. Inductance change: Within $\pm 10\%$. (Mn-Zn: Within $\leq 30\%$) 3.Q factor change: Within $\pm 20\%$.	1.Temperature: M(-55~-40$\pm 2^{\circ}\text{C}$) 2.Duration: 96± 2 hours 3.The chip shall be stabilized at normal condition for 1~2 hours before measuring. 

Items	Requirements	Test Methods and Remarks
High temperature Storage Reference documents: GB/T 2423.2-2008 Method Bb 高温储存试验	1.No visible mechanical damage. 2. Inductance change: Within $\pm 10\%$. (Mn-Zn: Within $\leq 30\%$) 3.Q factor change: Within $\pm 20\%$.	1.Temperature: $N(125 \sim 85 \pm 2^\circ\text{C})$. 2.Duration: 96 ± 2 hours 3.The chip shall be stabilized at normal condition for 1~2 hours before measuring. 
Damp Heat (Steady States) Reference documents: GB/T 2423.3-2016 恒定湿热试验	1.No visible mechanical damage. 2. Inductance change: Within $\pm 10\%$. (Mn-Zn: Within $\leq 30\%$) 3.Q factor change: Within $\pm 20\%$.	1.Temperature: $60 \pm 2^\circ\text{C}$ 2.Humidity: 90% to 95% RH. 3.Duration: 96 ± 2 hours. 4.The chip shall be stabilized at normal condition for 1~2 hours before measuring. 
Heat endurance of Reflow soldering Reference documents: GJB 360B-2009 回流焊耐热性试验	1.No significant defects in appearance. 2. $\Delta L/L \leq 10\%$ (Mn-Zn: $\Delta L/L \leq 30\%$) 3. $\Delta Q/Q \leq 30\%$ (SMD series only) 4. $\Delta DCR/DCR \leq 10\%$	1.Refer to the above reflow curve and go through the reflow for twice. 2.The peak temperature : $260 \pm 0/-5^\circ\text{C}$
Resistance to solvent test Reference documents: IEC 68-2-45:1993 耐溶剂性试验	No case deformation or change in appearance or obliteration of marking	To dip parts into IPA solvent for 5 ± 0.5 Min, then drying them at room temp for 5 Min, at last, to brushing making 10 times.
Overload test Reference documents: JIS C5311-6.13 过负荷试验	1.During the test no smoke, no peculiar, smell, no fire 2.The characteristic is normal after test	Apply twice as rated current for 5 minutes.
voltage resistance test Reference documents: MIL-STD-202G Method 301 绝缘耐压测试	1.During the test no breakdown 2.The characteristic is normal after test	1. For parts with two coils 2. DC1000V, Current: 1mA, Time: 1Min. 3. Refer to catalogue of specific products

◆推荐无铅波峰焊接曲线:

Lead-free the recommended Wave soldering (DIP-TYP) :



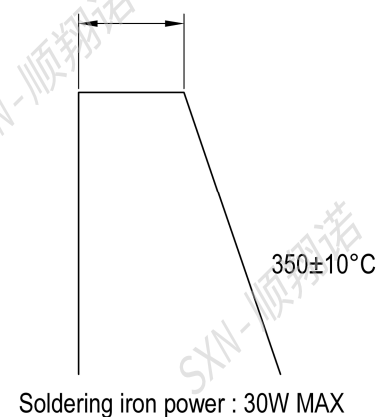
Notes:

The recommended wave soldering, is a reference to a single wave soldering recommended by the manufacturer, because the various manufacturers of soldering equipment, product process conditions, set methods and so on, when setting the soldering conditions, Please adjust and confirm according to users' environment/equipments.

□ Appendix 2: Soldering Iron (Rework)

- 1) Use soldering iron to solder inductors by hand, times does Not exceed 350 degrees 3 times.
- 2) When soldering iron welding, please try to avoid contacting the Inductor itself. (definitely do not contact the wire)
- 3) To solder inductors by soldering iron is not recommended).

3 Seconds MAX.



使用注意事项

REMINDERS FOR USING THESE PRODUCTS



- 保存时间为12 个月以内，保存条件（温度5~40°C以下、湿度35 ~ 66%RH 以下），需充分注意。
若超过保存时间，端子电极的可焊性将可能老化。

The storage period is within 12 months. Be sure to follow the storage conditions (temperature: 5~40°C, humidity: 35 to 65% RH or less). If the storage period elapses, the soldering of the terminal electrodes may deteriorate.

- 请勿在气体腐蚀环境（盐、酸、碱等）下使用和保存。

Do not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).

- 手上的油脂会导致可焊性降低，应避免用手直接接触端子。

Don't touch electrodes directly with bare hands as oil secretions may inhibit soldering. Always ensure optimum conditions for soldering.

- 请小心轻拿轻放，避免由于产品的跌落或取出不当而导致的损坏。

Please always handle products carefully to prevent any damage caused by dropping down or inappropriate removing.

- 端子过度弯曲会导致断线，请不要过度弯曲端子。

Don't bend the terminals with excessive stress in case of any wire fracture.

- 不要清洗产品，如需要清洗时请联系我司。

Don't rinse coils by yourself and please contact SXN if necessary.

- 请勿将本产品靠近磁铁或带有磁力的物体

Don't expose the products to magnets or magnetic fields

- 在实施焊接前，请务必进行预热。预热温度与焊接温度及芯片温度的温度差要在150°C 以内。

Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.

- 安装后的焊接修正应在规格书规定的条件范围内。若加热过度可能导致短路、性能降低、寿命减少。

Soldering corrections after mounting should be within the range of the conditions determined in the specifications. If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.

- 装置会因通电而自我发热（温度上升），因此在热设计方面需留有充分余地。

Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.

- 非磁屏蔽型在基板设计时需注意配置线圈，受到电磁干扰可能会导致误动作。

Carefully lay out the coil for the circuit board design of the non-magnetic shield type. A malfunction may occur due to magnetic interference.