



承認書

SPECIFICATION FOR APPROVAL

CUSTOMER:

DESCRIPTION:

SMD MOLDING POWER INDUCTOR

PART NO:

MWI0603UC系列

CUST. PART NO:

REV. NO.

A0

DRAWING		
PREPARED	CHECKED	APPROVED
邹声平	卢嘉良	曾凡强
DATE:	2025/5/1	

CUSTOMER APPROVE



东莞市铭易轩电子科技有限公司

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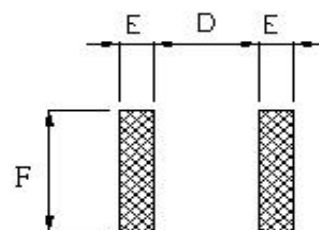
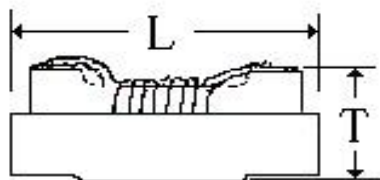
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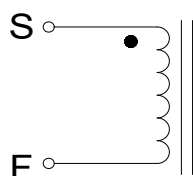
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1. SHAPE & DIMENSION (UNIT:mm)


Recommended patterns

L	W	T	E	F	D
1.8 Max.	1.12 Max.	0.95 Max.	0.64 Typ.	1.02 Typ.	0.64 Typ.

2. SCHEMATIC

3. PART NUMBERING SYSTEM

MWI	0603	UC	R10	J	S	T	-	HF
1	2	3	4	5	6	7		8

- 1 PRODUCT SYMBOL (产品代号)
- 2 DIMENSIONS (规格尺寸)
- 3 MATERIAL (芯片类型)
- 4 INDUCTANCE (电感量)
- 5 TOLERANCE (公差) : S±0.3; G±2%; J±5%; K±10%; M±20%
- 6 TERMINAL (端电极材料) : S-锡端头
- 7 PACKAGING (包装方式) : T-编带盘装; B-散装
- 8 E.P. (环保) : LF—Lead Free HF—Halogen Free FP—Red Phosphor Free

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4. ELECTRICAL CHARACTERISTICS

No.	Part Number	L	Freq	Q	SRF	Rdc	Irms	Tolerance
		(nH)	(MHz)	Min.	(MHz) Min.	(Ω) Max.	(mA) Max.	
1	MWI0603UC1N5□ST-HF	1.5	250	24	12500	0.03	700	S,K,M
2	MWI0603UC1N6□ST-HF	1.6	250	24	12500	0.03	700	S,K,M
3	MWI0603UC1N8□ST-HF	1.8	250	16	12500	0.045	700	S,K,M
4	MWI0603UC2N0□ST-HF	2	250	12	12500	0.25	700	S,K,M
5	MWI0603UC2N2□ST-HF	2.2	100	12	12500	0.25	700	S,J,K,M
6	MWI0603UC2N7□ST-HF	2.7	250	22	5900	0.045	700	S,J,K,M
7	MWI0603UC3N3□ST-HF	3.3	250	22	5900	0.045	700	S,J,K,M
8	MWI0603UC3N6□ST-HF	3.6	250	22	5900	0.063	700	S,J,K,M
9	MWI0603UC3N9□ST-HF	3.9	250	22	6900	0.08	700	S,J,K,M
10	MWI0603UC4N3□ST-HF	4.3	250	22	5900	0.063	700	S,J,K,M
11	MWI0603UC4N7□ST-HF	4.7	250	20	5800	0.116	700	S,J,K,M
12	MWI0603UC5N1□ST-HF	5.1	250	20	5700	0.14	700	J,K,M
13	MWI0603UC5N6□ST-HF	5.6	250	26	4760	0.075	700	J,K,M
14	MWI0603UC6N2□ST-HF	6.2	250	20	5700	0.14	700	J,K,M
15	MWI0603UC6N3□ST-HF	6.3	250	20	5700	0.14	700	J,K,M
16	MWI0603UC6N8□ST-HF	6.8	250	27	5800	0.11	700	J,K,M
17	MWI0603UC7N5□ST-HF	7.5	250	28	4800	0.106	700	J,K,M
18	MWI0603UC8N0□ST-HF	8	250	28	4700	0.109	700	J,K,M
19	MWI0603UC8N2□ST-HF	8.2	250	30	4200	0.115	700	J,K,M
20	MWI0603UC8N7□ST-HF	8.7	250	28	4600	0.109	700	J,K,M
21	MWI0603UC9N1□ST-HF	9.1	250	28	5400	0.125	700	J,K,M
22	MWI0603UC9N5□ST-HF	9.5	250	28	5400	0.125	700	J,K,M
23	MWI0603UC10N□ST-HF	10	250	31	4800	0.13	700	G,J,K,M
24	MWI0603UC11N□ST-HF	11	250	30	4000	0.13	700	G,J,K,M
25	MWI0603UC12N□ST-HF	12	250	35	4000	0.13	700	G,J,K,M

□:表示产品公差

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4. ELECTRICAL CHARACTERISTICS

No.	Part Number	L	Freq	Q	SRF	Rdc	Irms	Tolerance
		(nH)	(MHz)	Min.	(MHz) Min.	(Ω) Max.	(mA) Max.	
26	MWI0603UC13N□ST-HF	13	250	35	4000	0.13	700	G,J,K,M
27	MWI0603UC15N□ST-HF	15	250	35	4000	0.17	700	G,J,K,M
28	MWI0603UC16N□ST-HF	16	250	34	3300	0.17	700	G,J,K,M
29	MWI0603UC18N□ST-HF	18	250	35	3100	0.17	700	G,J,K,M
30	MWI0603UC20N□ST-HF	20	250	36	3000	0.18	700	G,J,K,M
31	MWI0603UC22N□ST-HF	22	250	38	3000	0.19	700	G,J,K,M
32	MWI0603UC23N□ST-HF	23	250	38	3000	0.19	700	G,J,K,M
33	MWI0603UC24N□ST-HF	24	250	36	2650	0.135	700	G,J,K,M
34	MWI0603UC27N□ST-HF	27	250	40	2800	0.22	600	G,J,K,M
35	MWI0603UC30N□ST-HF	30	250	37	2250	0.22	600	G,J,K,M
36	MWI0603UC33N□ST-HF	33	250	40	2300	0.22	600	G,J,K,M
37	MWI0603UC36N□ST-HF	36	250	37	2080	0.25	600	G,J,K,M
38	MWI0603UC39N□ST-HF	39	250	40	2200	0.25	600	G,J,K,M
39	MWI0603UC43N□ST-HF	43	250	38	2000	0.28	600	G,J,K,M
40	MWI0603UC47N□ST-HF	47	200	38	2000	0.28	600	G,J,K,M
41	MWI0603UC51N□ST-HF	51	200	35	1900	0.27	600	G,J,K,M
42	MWI0603UC56N□ST-HF	56	200	38	1900	0.31	600	G,J,K,M
43	MWI0603UC60N□ST-HF	60	200	37	1800	0.33	600	G,J,K,M
44	MWI0603UC62N□ST-HF	62	200	37	1800	0.33	600	G,J,K,M
45	MWI0603UC68N□ST-HF	68	200	37	1700	0.34	600	G,J,K,M
46	MWI0603UC72N□ST-HF	72	150	34	1700	0.49	400	G,J,K,M
47	MWI0603UC75N□ST-HF	75	150	28	1700	0.52	400	G,J,K,M
48	MWI0603UC82N□ST-HF	82	150	34	1700	0.54	400	G,J,K,M
49	MWI0603UC85N□ST-HF	85	150	34	1700	0.58	400	G,J,K,M
50	MWI0603UC91N□ST-HF	91	150	28	1600	0.58	400	G,J,K,M

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4. ELECTRICAL CHARACTERISTICS

No.	Part Number	L	Freq	Q	SRF	Rdc	Irms	Tolerance
		(nH)	(MHz)	Min.	(MHz) Min.	(Ω) Max.	(mA) Max.	
51	MWI0603UCR10□ST-HF	100	150	34	1400	0.58	400	G,J,K,M
52	MWI0603UCR11□ST-HF	110	150	32	1350	0.61	300	G,J,K,M
53	MWI0603UCR12□ST-HF	120	150	32	1300	0.65	300	G,J,K,M
54	MWI0603UCR13□ST-HF	130	150	32	1.150	0.92	290	G,J,K,M
55	MWI0603UCR15□ST-HF	150	150	28	990	0.92	280	G,J,K,M
56	MWI0603UCR16□ST-HF	160	150	28	990	1.25	280	G,J,K,M
57	MWI0603UCR18□ST-HF	180	100	25	990	1.25	240	G,J,K,M
58	MWI0603UCR20□ST-HF	200	100	25	900	1.98	200	G,J,K,M
59	MWI0603UCR22□ST-HF	220	100	25	900	2.1	200	G,J,K,M
60	MWI0603UCR24□ST-HF	240	100	25	900	2.2	200	G,J,K,M
61	MWI0603UCR25□ST-HF	250	100	25	882	2.55	120	G,J,K,M
62	MWI0603UCR27□ST-HF	270	100	26	830	2.16	170	G,J,K,M
63	MWI0603UCR29□ST-HF	290	100	25	800	3.2	100	G,J,K,M
64	MWI0603UCR30□ST-HF	300	100	25	790	2.5	100	G,J,K,M
65	MWI0603UCR33□ST-HF	330	100	25	790	3.89	100	G,J,K,M
66	MWI0603UCR39□ST-HF	390	100	25	780	4.35	100	G,J,K,M
67	MWI0603UCR47□ST-HF	470	100	25	700	4.5	100	G,J,K,M
68	MWI0603UCR56□ST-HF	560	100	23	460	5	90	G,J,K,M

□:表示产品公差

Test remarks

- (1).All test data is referenced to 25 °C ambient.
- (2).Irms: DC current that causes the temperature rise ($\Delta T \leq 40^{\circ}\text{C}$) from 25°C ambient.

5. GENERAL SPECIFICATION

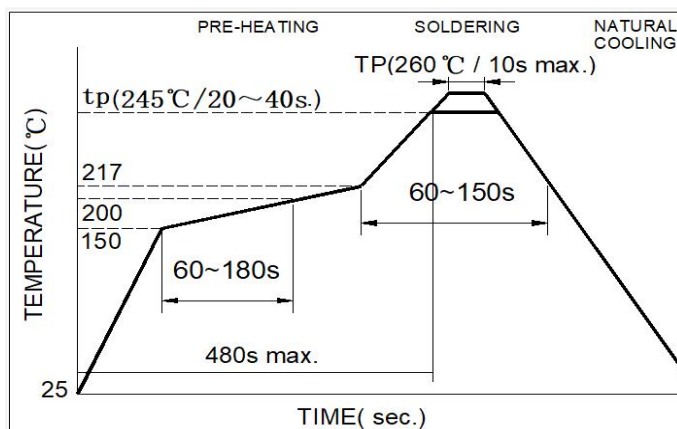
- (1). Operating temp.: -40°C ~ +125°C (Including self-generated heat).
- (2). Storage temp.: -10°C ~ +40°C R.H.:60% Max.
- (3). Moisture sensitivity level (MSL) 1
- (4). Recommended products should be used within 12 months from the date of delivery
- (5). The part temperature (ambient + temp rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

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6. SOLDERING CONDITIONS

Figure 1. Re-flow Soldering (Lead Free)



Note:

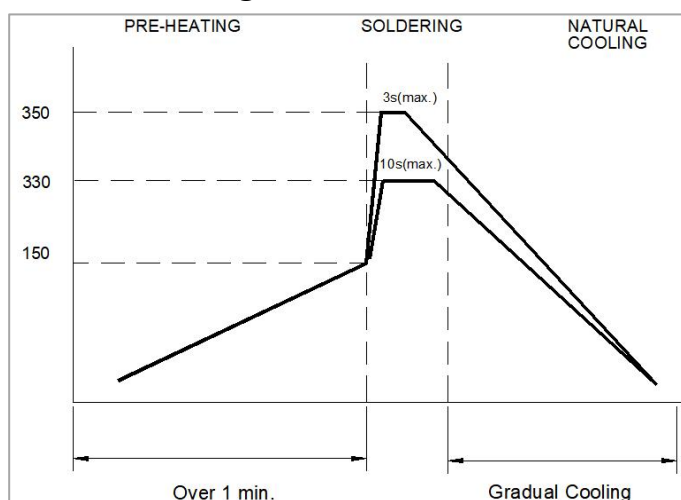
Preheat circuit and products to 150°C

260°C tip temperature (Max)

Reflow times: no more than 2 times

Solder paste thickness: the best 0.08mm is ,but max is 0.1mm

Figure 2. Hand Soldering



Note:

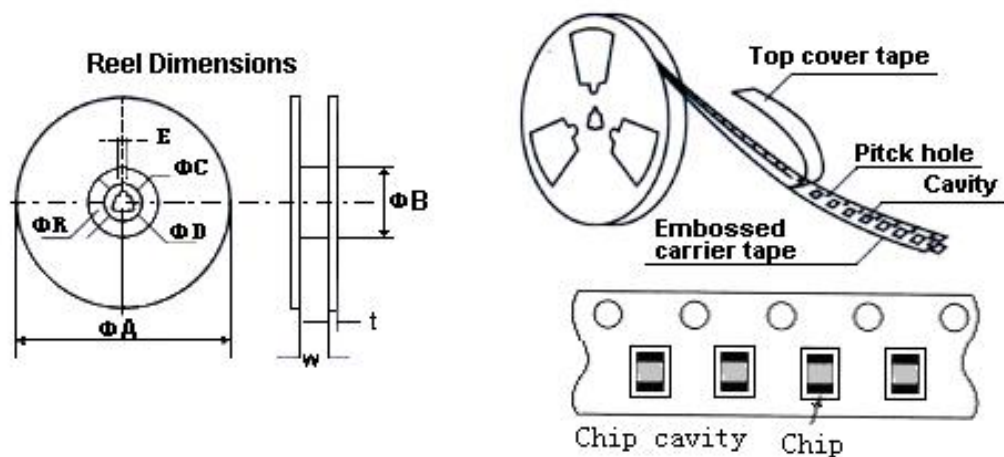
Use a 20 watt soldering iron with tip diameter of 1.0mm

Limit soldering time to 3 sec.

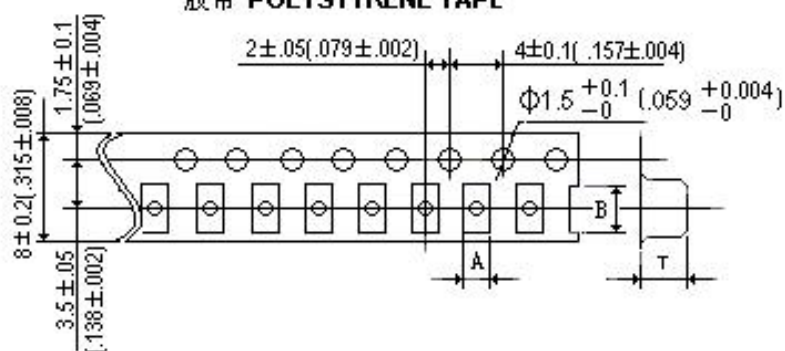
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7. PACKAGE SPECIFICATION



胶带 POLYSTYRENE TAPE



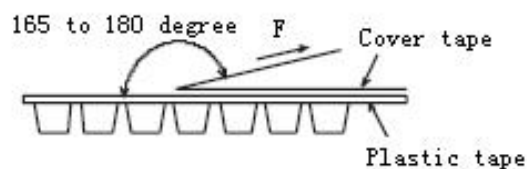
Peeling off force

Pull strength

0402~1210:20g~80g

Speed of peeling off:

300mm/min±10%



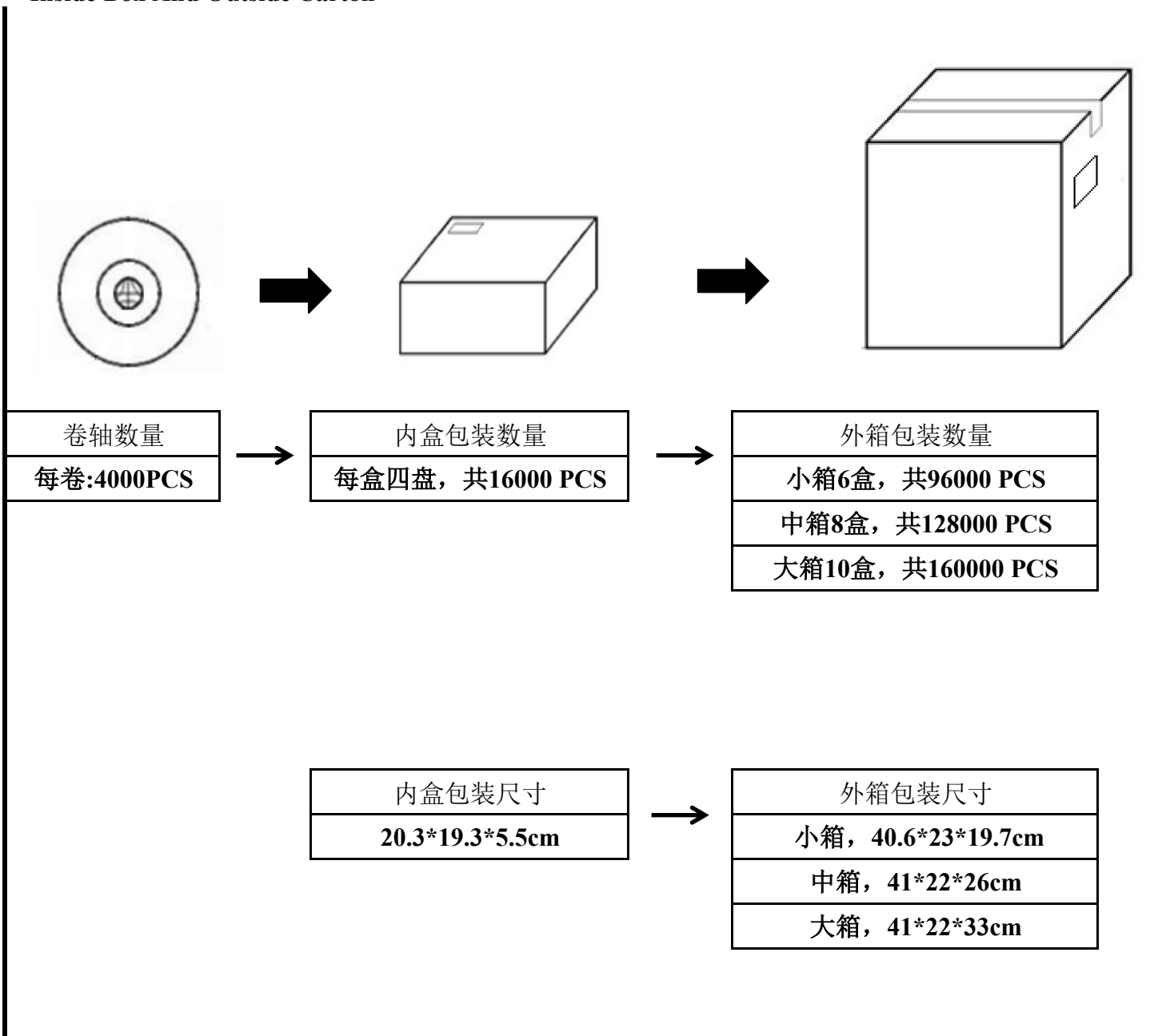
	A	B	T
胶带	1.15Typ.	1.83Typ.	0.95Typ.

ΦA	ΦB	ΦC	ΦD	E	W	t
178Typ.	60Typ.	13Typ.	21Typ.	2Typ.	8.4Typ.	2Typ.

包装数量(PACKAGING QUANTITY): 4000Pcs/盘

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8.Package Specifications
Inside Box And Outside Carton


卷轴数量	内盒包装数量	外箱包装数量
每卷:4000PCS	每盒四盘，共16000 PCS	小箱6盒，共96000 PCS
		中箱8盒，共128000 PCS
		大箱10盒，共160000 PCS

内盒包装尺寸	外箱包装尺寸
20.3*19.3*5.5cm	小箱，40.6*23*19.7cm
	中箱，41*22*26cm
	大箱，41*22*33cm

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