

MESSRS:

INCOMP INTERNATIONAL LTD

SPEC No. H500-0453

RoHS Compliant
環保品

DATE: 2010.04.28

《NEW/AMENDED》

APPROVAL SPECIFICATION

DESCRIPTION : SMD POWER INDUCTOR

MODEL(PART No.): DA53904714; DA53904715

CUSTOMER'S PATR No.:

AMENDED

CUSTOMER'S PART No.:




【FOR APPROVAL】

DATE:

*THIS SPECIFICATION IS CONSTITUTED WITH PAGES INCLUDING ATTACHMENTS.

高雅線圈製品有限公司

COILS ELECTRONIC CO., LTD.

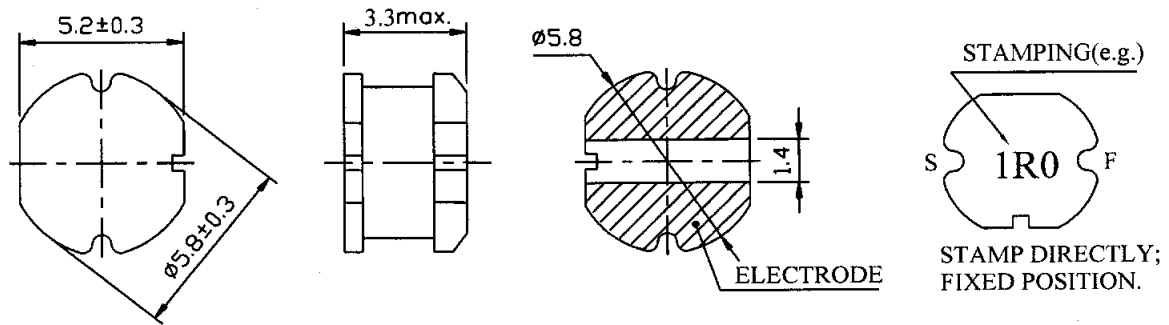
Approved by	Checked by	In charge
		

AE COILS ELECTRONIC CO., LTD.

SPECIFICATIONS

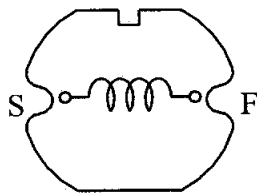
TYPE

1. DIMENSIONS (UNIT: mm)



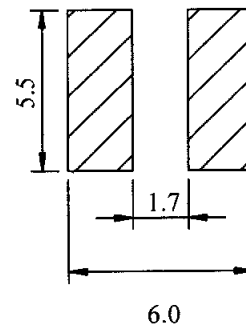
* DIMENSIONS OF ELECTRODE ARE TYPICAL.

2. CONNECTION (BOTTOM)

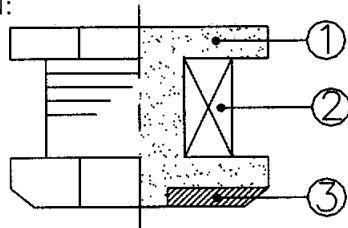


"S" INDICATES THE WINDING START.
THE NICK INDICATES THE WINDING ORIENTATION.

3. RECOMMENDED LAND PATTERN (UNIT: mm)



4. CONSTRUCTION:



No.	NAME	MATERIAL	MANUFACTURER	COUNTRY OF ORIGIN	UL FILE NO.	TEMP. CLASS
1	DRUM CORE	FERRITE CORE EL8H OR EQUIVALENT	TONICHI FERRITE PRODUCTS CO., LTD	CHINA	NA	NA
2	WIRE	POLYURETHANE ENAMELLED COPPER WIRE OR EQUIVALENT	JUNG SHING WIRE CO., LTD.	CHINA	E174837	155°C
			PACIFIC-THAI ELECTRIC WIRE & CABLE CO., LTD.	THAILAND	E142108	155°C
			TA YA ELECTRIC WIRE FACTORY	CHINA	E197768	155°C
3	ELECTRODE	Ag-Ni-Sn PLATING+SOLDER OR EQUIVALENT	TONICHI FERRITE PRODUCTS CO., LTD.	CHINA	NA	NA
	SOLDER	Sn99.3-Cu0.7 OR EQUIVALENT	YUNNAN TIN CO.,LTD.	CHINA	NA	NA
	STAMP	INK(5506) OR EQUIVALENT	IMAGE CORPORATION	FRANCE	NA	NA

NOTE

RoHS Compliant
環保品

SPEC. No.

2/4

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SPECIFICATIONS

TYPE

5. ELECTRICAL CHARACTERISTICS

No.	CUST.P/N.	CEC.P/N.	L (μ H)	L TOLERANCE	D.C.R. (Ω , at 25°C) Max.	RATED CURRENT Max. (A)		STAMP
						Idc1	Idc2	
01			1.0	M	26.6m	6.20	3.71	1R0
02			1.2		34.0m	5.56	3.44	1R2
03			1.8		41.3m	4.70	3.08	1R8
04			2.2		48.9m	4.08	2.83	2R2
05			2.7		55.8m	3.60	2.64	2R7
06			3.3		61.6m	3.22	2.68	3R3
07			4.7		87.0m	2.91	2.02	4R7
08			5.6		98.2m	2.66	1.93	5R6
09			6.8		118m	2.26	1.79	6R8
10			8.2		131m	2.11	1.72	8R2
11			10	M, K	153m	1.85	1.58	100
12			12		191m	1.75	1.41	120
13			15		269m	1.57	1.31	150
14			18		318m	1.42	1.07	180
15			22		345m	1.30	1.02	220
16			27		394m	1.15	0.96	270
17			33		481m	1.04	0.88	330
18			39		543m	0.97	0.84	390
19			47		802m	0.89	0.64	470
20			56		905m	0.79	0.63	560
21			68		1.3	0.75	0.43	680
22		DA53904714	82	K	1.5	0.67	0.42	820
23		DA53904715	100	K	1.7	0.61	0.40	101

* ☐ : M: $\pm 20\%$, K: $\pm 10\%$.

* MEASURING FREQUENCY $L \geq 10 \mu H$ at 1 kHz/1V $L < 10 \mu H$ at 100 kHz/1V

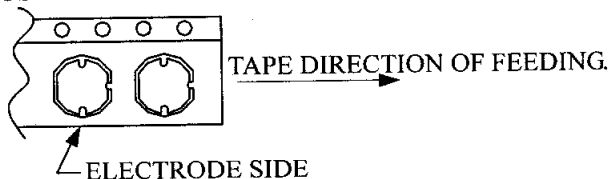
* Idc1: THIS INDICATES THE CURRENT WHEN THE INDUCTANCE IS 10% LESS THAN IT'S INITIAL VALUE.

* Idc2: THIS INDICATES THE CURRENT WHEN THE TEMPERATURE RISE IS 40°C (Ta = 20°C)

* RATED CURRENT INDICATES THE SMALLER ONE BETWEEN Idc1 AND Idc2.

6. PACKING

* ENCLOSING CONDITION OF COILS.



PACKAGE TO BE ACCORDING TO PACKAGE SPECIFICATIONS (TICK THE RELEVANT "✓")

☐ KB - CTR010; ☒ KB - CTR618; ☐ KB - CTR818

☐ SPECIAL FOR CUSTOMER KB _____.

* RECOMMENDED REFLOW CONDITION BASES ON STD-001NP.

NOTE	SPEC. No.
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SPECIFICATIONS

TYPE

7. GENERAL CHARACTERISTICS

* STANDARD TESTING CONDITIONS:

UNLESS OTHERWISE SPECIFIED, THE STANDARD RANGE OF ATMOSPHERIC CONDITIONS FOR MEASUREMENTS AND TESTS ARE AS FOLLOWS: AMBIENT TEMPERATURE: 15°C~35°C.

RELATIVE HUMIDITY : 25% ~85%. AIR PRESSURE : 86kPa ~106kPa.

IF THERE IS ANY DOUBT ABOUT THE RESULTS, MEASUREMENT SHALL BE MADE WITHIN THE FOLLOWING LIMITS: AMBIENT TEMPERATURE: 20°C±1°C. RELATIVE HUMIDITY: 63% ~67%.

AIR PRESSURE : 86kPa ~106kPa.

No.	ITEMS	CONDITIONS	SPECIFICATION
1	OPERATION TEMPERATURE		-25 ~ +125°C (INCLUDING COIL TEMPERATURE RISE)
	STORAGE TEMPERATURE		-40 ~ +125°C
2	TEMPERATURE COEFFICIENT	-40 ~ +125°C	0 ~ 2000 ppm/°C
3	FIXING STRENGTH	SAMPLE IS PUSHED IN THREE DIRECTIONS OF X, Y AND Z WITH FORCE OF 10N FOR 60±5 SECONDS. AFTER SOLDERING BETWEEN COPPER PLATE AND ELECTRODES.	NO ELECTRODE DETACHMENT.
4	RESISTANCE TO SOLDERING HEAT TEST	PLEASE REFER TO THE ATTACHMENT STD-002NP.	NO MECHANICAL BREAKAGE. DEVIATION RELATIVE TO INITIAL VALUE: L: WITHIN ±5.0%
5	SOLDER ABILITY TEST	IMMERSE THE ELECTRODE IN FLUX FOR 5 SECONDS. THEN DIP THE ELECTRODE INTO A SOLDERING BATH OF 245±5°C FOR 2±0.5 SECONDS.	OVER 90% OF THE SURFACE BEING IMMERSED SHALL BE COVERED WITH NEW SOLDER UNIFORMLY.
6	VIBRATION TEST	AMPLITUDE: 1.5mm P-P FREQUENCY: 10~55~10Hz (1 MINUTE PER CYCLE) DURATION: 2 HOURS IN EACH OF X, Y, Z AXIS. (TOTAL 6 HOURS)	DEVIATION RELATIVE TO INITIAL VALUE: L: WITHIN ±2.0%
7	SHOCK TEST	PEAK ACCELERATION: 981m/s ² DURATION OF PULSE: 10ms SHOCK TIMES: 3 TIMES IN EACH OF X, Y, Z AXIS. (TOTAL 9 TIMES)	
8	HUMIDITY TEST	TEMPERATURE: 40°C±2°C HUMIDITY: 90%~95%RH DURATION: 96±4 HOURS.	DEVIATION RELATIVE TO INITIAL VALUE: L: WITHIN ±5.0%

8.REMARK.

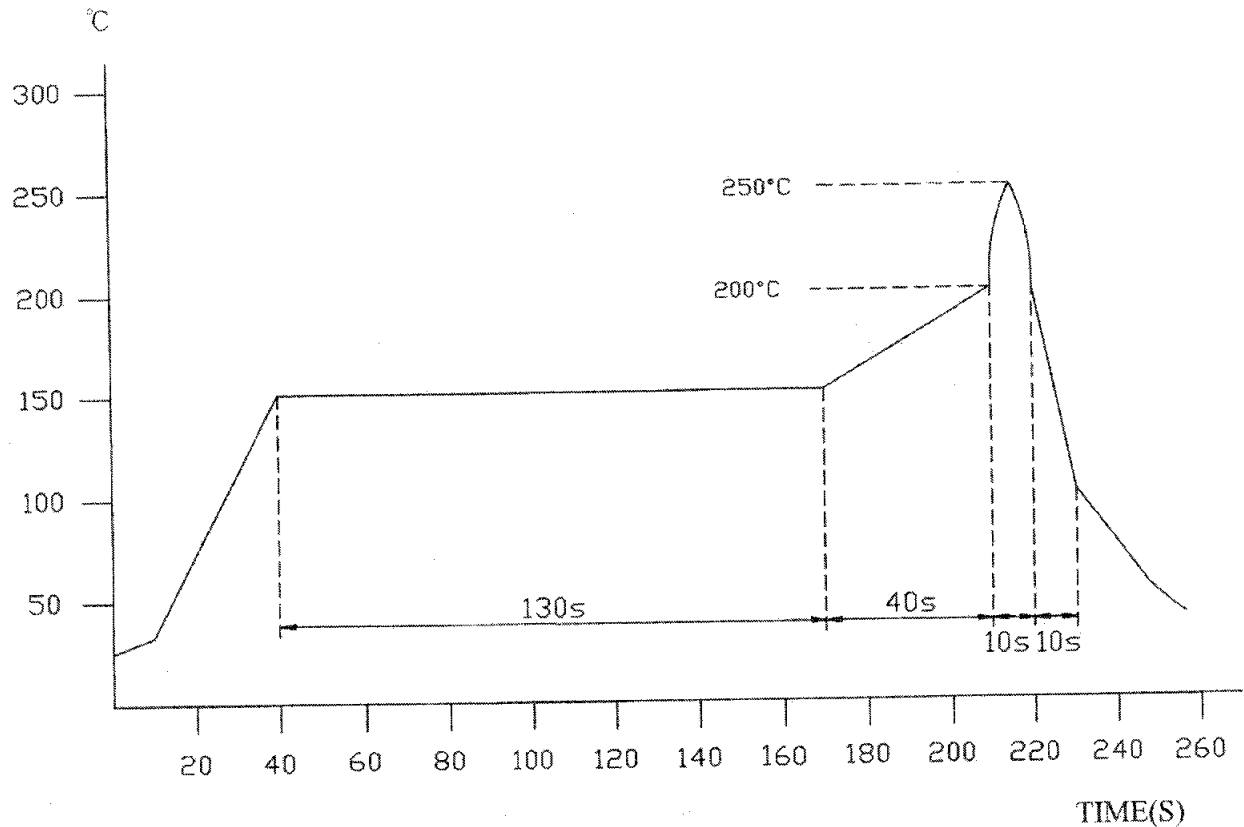
*RoHS COMPLIANCE REMARKS

LEAD WILL BE PRESENT IN THE FERRITE CORE OF THE FRIT MATRIX IN THE COMPONENT. THIS USE, IS EXEMPT FROM ROHS LEGISLATION PER THE ANNEX (ITEM 7), WHICH REFERS TO "LEAD IN ELECTRONIC CERAMIC PART".

NOTE	SPEC. No. 4/4 H500-0453
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THE RECOMMENDED REFLOW CONDITION (LEAD FREE)

TEMPERATURE



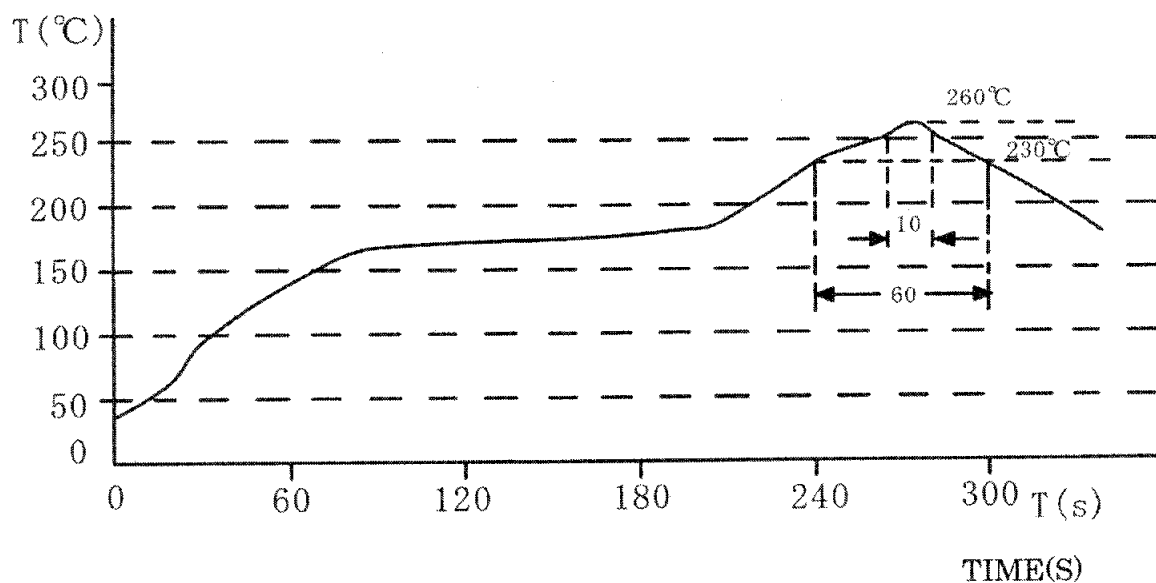
* THE REFLOW CONDITION RECOMMENDED ABOVE IS ACCORDING TO THE MACHINE USED BY OUR COMPANY. BIG DIFFERENCES WILL ARISE AS A RESULT OF THE TYPE OF MACHINE, REFLOW CONDITIONS, METHOD, ETC USED. HENCE, BEFORE SETTING UP YOUR REFLOW CONDITIONS, PLEASE CONFIRM WITH THE ABOVE. MOREOVER, PLEASE CLEAR ALL DOUBTS WITH OUR COMPANY BEFORE STARTING.

25th, Feb., 2004			VERSIONS	1	25th, Feb., 2004	FILE No. 1/1 STD-001NP
APPROVAL	CHECK	PREPARE		2	9th, Nov., 2004	

COILS ELECTRONIC CO., LTD.

HEAT ENDURANCE TEST (LEAD FREE)

TEMPERATURE



- * THE TEST SHOULD BE MADE UNDER THE CONDITIONS ACCORDING TO THE CHART, AFTER THE TEST IT IS KEPT FOR 2 HOURS UNDER THE NORMAL TEMPERATURE AND HUMIDITY. THEN, NO MECHANICAL AND ELECTRICAL DEFECT SHOULD BE FOUND OUT.
- * THE REFLOW TEST CAN BE DONE TWICE, BUT THE INTERVAL SHOULD BE MORE THAN ONE HOUR UNDER THE NORMAL CONDITIONS.
- * THE REFLOW TEST CONDITIONS ARE BASED ON THE TESTING INSTRUMENTS AVAILABLE IN CEC.

25th, Feb., 2004			REVISIONS	FILE No. 1/1 STD-002NP
APPROVAL	CHECK	PREPARE		

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