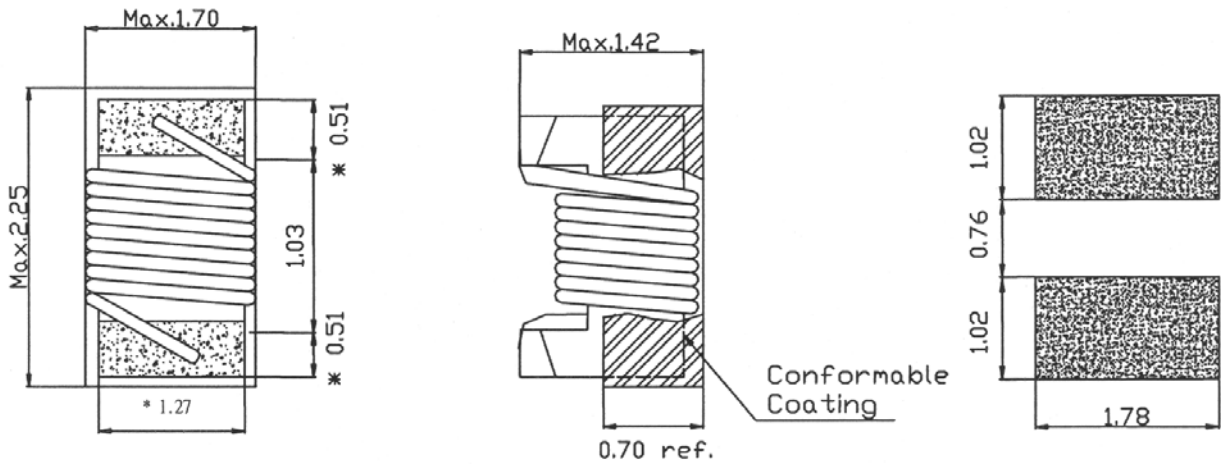


SPECIFICATION

TYPE CCFH 0805 C

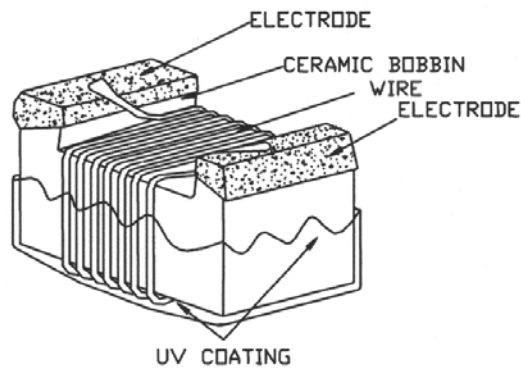
1. APPEARANCE DIMENSION (UNIT : mm)



* ELECTRODE DIMENSION

※TOLERANCE: ±0.1mm.

2. FORMATION STRUCTURE



PARTS	MATERIAL	MANUFACTURE	COUNTRY OF ORIGIN	UL No.
BOBBIN	CERAMIC (MB-2UBW4-M2S8)	PHONON MEIWA INC.	CHINA (TAIWAN)	NA
WIRE	POLYESTER ENAMELLED COPPER WIRE	JUNG SHING WIRE CO., LTD.	CHINA	E174837
		FUJI ELECTRIC WIRE CO., LTD.	JAPAN	E78671
		RIKEN ELECTRIC WIRE CO., LTD.	JAPAN	E79028
UV COATING	UV RESIN (TB1357B)	THREEBOND (HONG KONG) CO., LTD.	CHINA (HONG KONG)	NA

* NA: NOT APPLICABLE.

4th. June., 2003			CEC. P/N:	
APPROVAL	CHECK	DESIGN	Ref. To P.3/7	
			REMARK	SPEC. No. 2/5
			<div style="border: 2px solid black; padding: 5px; display: inline-block;">LEAD FREE</div>	H500-0168

TYPE

CCFH 0805 C

3. ELECTRICAL CHARACTERISTICS

No.	CEC. P/N	Inductance		Test Freq. (MHz)	Q Min.	Test Freq. (MHz)	S.R.F. (MHz)Min.	DCR (Ω) max.	DCI (mA)
		L(nH)	Tolerance *						
01	CCFH 0805 C 2N7 <input type="checkbox"/>	2.7	J, K	250	80	1500	7900	0.06	800
02	CCFH 0805 C 3N0 <input type="checkbox"/>	3.0	J, K	250	65	1500	7900	0.06	800
03	CCFH 0805 C 3N3 <input type="checkbox"/>	3.3	J, K	250	50	1500	7900	0.08	600
04	CCFH 0805 C 5N6 <input type="checkbox"/>	5.6	J, K	250	65	1000	5500	0.08	600
05	CCFH 0805 C 6N8 <input type="checkbox"/>	6.8	J, K	250	50	1000	5500	0.11	600
06	CCFH 0805 C 7N5 <input type="checkbox"/>	7.5	J, K	250	50	1000	4500	0.14	600
07	CCFH 0805 C 8N2 <input type="checkbox"/>	8.2	G, J, K	250	50	1000	4700	0.12	600
08	CCFH 0805 C 10N <input type="checkbox"/>	10.0	G, J, K	250	60	500	4200	0.10	600
09	CCFH 0805 C 12N <input type="checkbox"/>	12.0	G, J, K	250	50	500	4000	0.15	600
10	CCFH 0805 C 15N <input type="checkbox"/>	15.0	G, J, K	250	50	500	3400	0.17	600
11	CCFH 0805 C 18N <input type="checkbox"/>	18.0	G, J, K	250	50	500	3300	0.20	600
12	CCFH 0805 C 22N <input type="checkbox"/>	22.0	G, J, K	250	55	500	2600	0.22	500
13	CCFH 0805 C 24N <input type="checkbox"/>	24.0	G, J, K	250	50	500	2000	0.22	500
14	CCFH 0805 C 27N <input type="checkbox"/>	27.0	G, J, K	250	55	500	2500	0.25	500
15	CCFH 0805 C 33N <input type="checkbox"/>	33.0	G, J, K	250	60	500	2050	0.27	500
16	CCFH 0805 C 36N <input type="checkbox"/>	36.0	G, J, K	250	55	500	1700	0.27	500
17	CCFH 0805 C 39N <input type="checkbox"/>	39.0	G, J, K	250	60	500	2000	0.29	500
18	CCFH 0805 C 43N <input type="checkbox"/>	43.0	G, J, K	200	60	500	1650	0.34	500
19	CCFH 0805 C 47N <input type="checkbox"/>	47.0	G, J, K	200	60	500	1650	0.31	500
20	CCFH 0805 C 56N <input type="checkbox"/>	56.0	G, J, K	200	60	500	1550	0.34	500
21	CCFH 0805 C 68N <input type="checkbox"/>	68.0	G, J, K	200	60	500	1450	0.38	500
22	CCFH 0805 C 82N <input type="checkbox"/>	82.0	G, J, K	150	65	500	1300	0.42	400
23	CCFH 0805 C 91N <input type="checkbox"/>	91.0	G, J, K	150	65	500	1200	0.48	400
24	CCFH 0805 C R10 <input type="checkbox"/>	100.0	G, J, K	150	65	500	1200	0.46	400
25	CCFH 0805 C R11 <input type="checkbox"/>	110.0	G, J, K	150	50	250	1000	0.48	400
26	CCFH 0805 C R12 <input type="checkbox"/>	120.0	G, J, K	150	50	250	1100	0.51	400
27	CCFH 0805 C R15 <input type="checkbox"/>	150.0	G, J, K	100	50	250	920	0.56	400
28	CCFH 0805 C R18 <input type="checkbox"/>	180.0	G, J, K	100	50	250	870	0.64	400
29	CCFH 0805 C R22 <input type="checkbox"/>	220.0	G, J, K	100	50	250	850	0.70	400
30	CCFH 0805 C R24 <input type="checkbox"/>	240.0	G, J, K	100	44	250	690	1.0	350
31	CCFH 0805 C R27 <input type="checkbox"/>	270.0	G, J, K	100	48	250	650	1.0	350
32	CCFH 0805 C R33 <input type="checkbox"/>	330.0	G, J, K	100	48	250	600	1.4	310
33	CCFH 0805 C R39 <input type="checkbox"/>	390.0	G, J, K	100	48	250	560	1.5	290
34	CCFH 0805 C R47 <input type="checkbox"/>	470.0	J, K	50	33	100	375	1.76	250
35	CCFH 0805 C R56 <input type="checkbox"/>	560.0	J, K	25	23	50	340	1.90	230
36	CCFH 0805 C R68 <input type="checkbox"/>	680.0	J, K	25	23	50	188	2.20	190
37	CCFH 0805 C R82 <input type="checkbox"/>	820.0	J, K	25	23	50	215	2.35	180
38	CCFH 0805 C 1R0 <input type="checkbox"/>	1000.0	J, K	25	23	50	282	6.90	92

* Testing instrument and conditions

DCR : HP 34420A or equivalent

S.R.F. : HP 8720ES or equivalent

Inductance & Q : HP 4287A & HP16193A or equivalent

DCI : Based on a 20°C maximum temperature rise.

※ Inductance tolerance: G = $\pm 2\%$, J = $\pm 5\%$, K = $\pm 10\%$

REMARK

SPEC. No.

3/5

H500-0168



4. STORAGE TEMPERATURE: -40 ~ +125°C.

5. OPERATION TEMPERATURE: -40 ~ +125°C (INCLUDING COIL TEMPERATURE RISE DUE TO SELF-GENERATED HEAT)

6. RELIABILITY TEST STANDARD

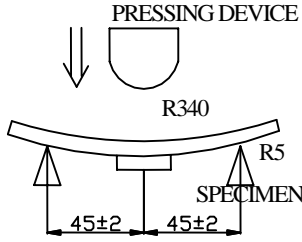
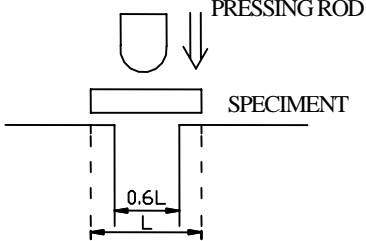
* STANDARD TESTING CONDITIONS:

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.	ITEM	CONDITION	SPECIFICATION
1	TEMPERATURE COEFFICIENT	-40 ~ +85°C	DEVIATION RELATIVE TO INITIAL VALUE AT 25°C. L: WITHIN±5.0%
2	BENDING	<p>APPLY PRESSURE GRADUALLY IN THE DIRECTION OF THE ARROW AT A RATE OF ABOUT 0.5mm/sec UNTIL BENT DEPTH REACHES 3mm AND HOLD FOR 30sec.</p>  <p>BOARD: 40x100mm, THICKNESS 1.0mm.</p>	NO MECHANICAL DAMAGE SUCH AS BREAKAGE OR CRACK. ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED.
3	FIXING STRENGTH	SAMPLE IS PUSHED IN THREE DIRECTIONS OF X, Y AND Z WITH FORCE OF 10N FOR 10 SECONDS AFTER SOLDERING BETWEEN COPPER PLATE AND ELECTRODES.	NO ELECTRODE DETACHMENT.
4	BODY STRENGTH TEST	<p>STATIC PRESSURE: 10N DURATION: 10 SECONDS</p> 	NO MECHANICAL DAMAGE SUCH AS BREAKAGE OR CRACK. ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED.
5	SOLDERABILITY 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 95% OF THE SURFACE BEING IMMERSSED SHALL BE COVERED WITH NEW SOLDER UNIFORMLY.

REMARK

SPEC. No.

4/5

H500-0168

TYPE

CCFH 0805 C

②

No.	ITEM	CONDITION	SPECIFICATION						
6	RESISTANCE TO SOLDERING HEAT TEST(SOLDERING IRON)	APPLY THE SOLDERING IRON OF 350°C±10°C TO EACH ELECTRODE FOR 3±0.5 SECONDS.	NO MECHANICAL BREAKAGE. DEVIATION RELATIVE TO						
7	RESISTANCE TO SOLDERING HEAT TEST (REFLOW SOLDERING)	PLEASE REFER TO THE ATTACHMENT STD-002NP.	INITIAL VALUE: L: WITHIN ±3.0%						
8	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%						
9	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)							
10	LOW TEMPERATURE STORAGE TEST	TEMPERATURE: -40°C±3°C DURATION: 1000±12 HOURS. RECOVERY: 1 TO 2 HOURS RECOVERY UNDER STANDARD CONDITION.							
11	HIGH TEMPERATURE STORAGE TEST	TEMPERATURE: 125°C±2°C DURATION: 1000±12 HOURS. RECOVERY: 1 TO 2 HOURS RECOVERY UNDER STANDARD CONDITION.							
12	HUMIDITY TEST	TEMPERATURE: 60°C±2°C HUMIDITY: 90%~95%RH DURATION: 1000±12 HOURS. RECOVERY: 1 TO 2 HOURS RECOVERY UNDER STANDARD CONDITION.	* NO MECHANICAL BREAKAGE. * DEVIATION RELATIVE TO INITIAL VALUE: L: WITHIN ±5.0% Q: WITHIN ±20%						
13	HUMIDITY LOAD LIFE TEST	TEMPERATURE: 60°C±2°C HUMIDITY: 90%~95%RH LOAD CONDITION: RATED CURRENT DURATION: 1000±12 HOURS. RECOVERY: 1 TO 2 HOURS RECOVERY UNDER STANDARD CONDITION.							
14	THERMAL SHOCK	100 CONTINUOUS CYCLES SHOWN AS BELOW <table border="1"> <thead> <tr> <th>TEMPERATURE</th> <th>DURATION</th> </tr> </thead> <tbody> <tr> <td>-40°C±3°C</td> <td>30 MINUTES.</td> </tr> <tr> <td>125°C±2°C</td> <td>30 MINUTES.</td> </tr> </tbody> </table> RECOVERY: 1 TO 2 HOURS RECOVERY UNDER STANDARD CONDITION.	TEMPERATURE	DURATION	-40°C±3°C	30 MINUTES.	125°C±2°C	30 MINUTES.	
TEMPERATURE	DURATION								
-40°C±3°C	30 MINUTES.								
125°C±2°C	30 MINUTES.								

7. PACKING

PACKAGE TO BE ACCORDING TO SPECIFICATION (TICK THE RELEVANT “ √ ”)

- PACKAGE TO BE ACCORDING TO PACKAGE SPEC. KB-CTR002.
 PACKAGE TO BE ACCORDING TO PACKAGE SPEC. KB-CTR602.
 SPECIAL FOR CUSTOMER KB _____ .

8. REMARK

- * RECOMMENDED REFLOW CONDITION BASES ON STD-001NP.
* RECOMMENDED HEAT ENDURANCE TEST BASES ON STD-002NP.

REMARK	SPEC. No. 5/5 H500-0168
--------	-----------------------------------

PACKAGE SPECIFICATION AMENDMENT RECORD

SYMBOL	DATE	PAGE	CONTENTS	DWN. BY	CHK. BY	APP. BY
①	2001/10/30	2/5	2. APPLICATION(TYPES) CCSP 0805 F ADDED	XUE YU	DONG RONG	ZHONG XIN
②	2002/07/16	2/5	2. APPLICATION(TYPES) CCSP 0805 M ADDED	ZHENGJUN	LIAOHUI	ANGJIAN
③	2003/5/19	5/5	ADD VACUUM PACKING	CAIQIANG	LIAOHUI	WEI DE
④	2004.10.15	4/5	CHANGE TAPE DIMENSIONS: A: 2.0±0.2→1.8±0.1 B: 2.6±0.1→2.45±0.1 C: 2.0max→1.48±0.1 T: 0.3max→0.2±0.02	BONENG	TINGHUA	HUIZHONG
⑤	2005/01/31	5/6	ADD DESICCANT IN THE INNER BOX	KEXINYE	KEXINGANG	HUIZHONG
⑥	2005/12/27	2/5	APPLICATION TYPES ADDED : CFFH 0805 F, CCFH 0805 C	B.L.Jiang	T.H.Zhang	H.Z.Cao
				PACKAGE SPEC. No. 1/5		
				KB-CTR002		

PACKAGE SPECIFICATION

1. APPLICATION OF THIS SPECIFICATION

1) APPLIES TO CEC COILS ELECTRONIC CO.,LTD. PACKING

2. APPLICATION(TYPES) : ^①CCSP 0805 C 、 ^②CCSP 0805 M 、 ^③CCSP 0805 F 、 ^④CFFH 0805 F 、 ^⑤CCFH 0805 C

3. TAPING SPECIFICATION

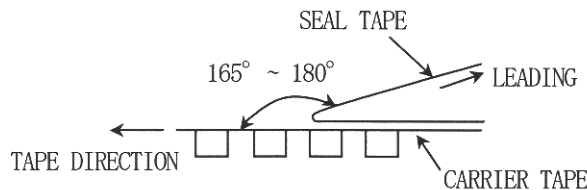
- 1) REEL DIMENSIONS·····FIGURE 1
- 2) TAPE DIMENSIONS·····FIGURE 2
- 3) TAPE DIRECTION·····FIGURE 3

4. TAPING

1) THE CARRIER TAPE AND SHIELD TAPE IS WOUND IN ONE CONTINUOUS REEL WITHOUT ANY JOINTED PORTIONS. SHOULD ANY PIECE OF COIL BE MISSING FROM THE CARRIER TAPE, A "CROSS(X)" SLIT WOULD BE MADE ON THE SHIELD OF THE CARTRIDGE AND A COIL REPLACED. AFTER WHICH, CELLOPHANE TAPE IS USED TO RESEAL THE CARTRIDGE.

2) THE ANGLE BETWEEN THE SEAL TAPE DURING PEEL OFF AND THE DIRECTION OF UNREELING SHALL BE 165° TO 180° .THE SEAL TAPE SHALL ADHERE UNIFORMLY TO THE CARRIER TAPE ALONG BOTH SIDES IN THE DIRECTION OF UNREELING .THE PEEL FORCE WITH A PEEL SPEED OF 300mm/MIN ± 10mm/MIN SHALL BE AS FOLLOWS:

- 0.1N TO 1.0N FOR AN 8mm TAPE WIDTH.
- 0.1N TO 1.3N FOR A 12mm~56mm TAPE WIDTH.






3) PRECAUTION : COMPLETED REELS WITH RADIUS LESS THAN 30mm WILL RESULT IN THE FOLLOWING

- (I) CRACKS ON THE CARRIER TAPE
- (II) SHIELD TAPE TEARING OFF

5. PACKING

- 1) POSITION OF COILS IN THE CARRIER TAPE: THE ELECTRODE SIDE IS UP.
- 2) THERE SHOULD NOT BE:
 - (I)WRONG POSITION OF GOODS IN THE CARRIER TAPE
 - (II)REJECTED GOODS IN THE CARRIER TAPE
 - (III)MISSING GOODS FROM THE CARRIER TAPE
- 3) ONE REEL CONTAINS 3000pcs OF COIL.
- 4) AT THE COMPLETED END OF THE REEL, THE CARRIER TAPE IS FIXED WITH A DRIVING TAPE.

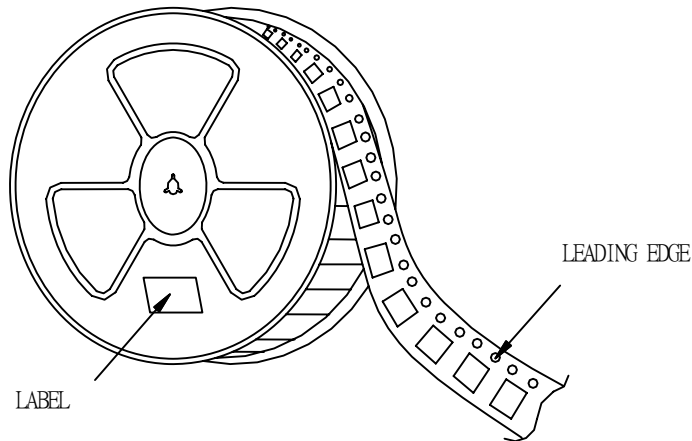
20th. Apr. , 2001			PART NO. : _____	Sample No. _____
CHK.	CHK.	DRG		
			NOTE	PACKAGE SPEC.No. 2/5
KB-CTR002				

6. INDICATION

1) THE FOLLOWING WILL BE INDICATED ON ONE SIDE OF THE REEL:

TYPE NAME	
CUSTOMER PART NO.	
SUPPLIER PART NO.	
SUPPLIER SPEC. NO.	
QUANTITY	
LOT NO.	

2) LABEL DESCRIPTION POSITION REFER TO RIGHT FIGURE:



7. HANDLING PRECAUTION

THE SURFACE OF THE REEL CANNOT WITHSTAND A WEIGHT/FORCE EXCEEDING 9.8N.

8. STORAGE

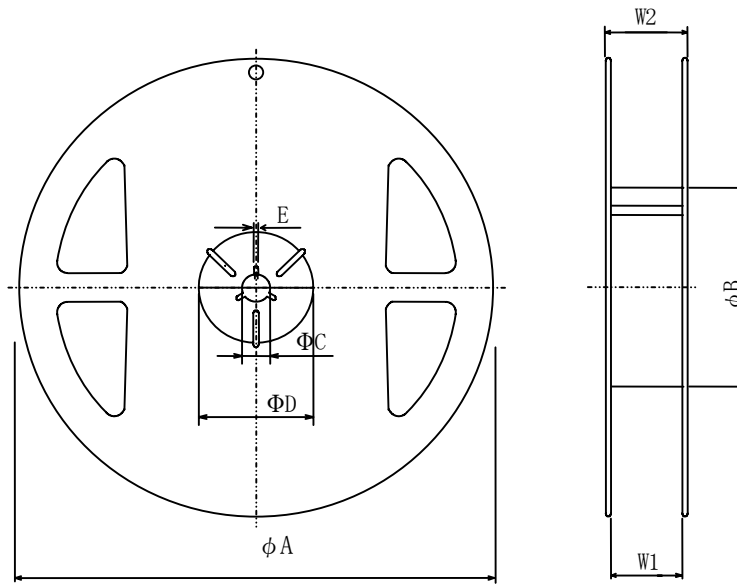
GOODS SHOULD BE STORED BETWEEN 0°C AND 60°C(TEMPERATURE), WITHIN 90%(HUMIDITY) AND WITHOUT A DROP OF WATER. AND REEL SHOULD BE REWOUND IN CASE FOR LONGTIME STORAGE.

9. OTHERS

UNIT FOR COUNT MEASURE IN PLACING ORDERS : REEL.

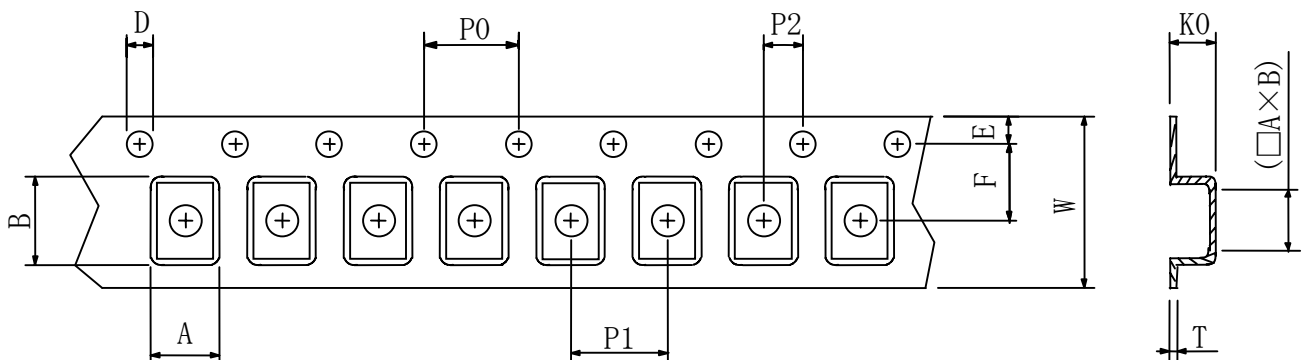
NOTE	PACKAGE SPEC. No. 3/5
	KB-CTR002

FIGURE 1 REEL DIMENSION



Reel Dimensions(mm)						
A	B	C	D	E	W1	W2
$\phi 180 \pm 0, -3$	$\phi 60 \pm 1, -0$	$\phi 13 \pm 0.2$	$\phi 21 \pm 0.8$	2.0 ± 0.5	$9 \pm 1, -0$	11.4 ± 1.0

FIGURE 2 TAPE DIMENSION



Tape Dimensions(mm)				
A	B	K0	T	W
1.8 ± 0.1	2.45 ± 0.1	1.48 ± 0.1	0.2 ± 0.02	8.0 ± 0.3

Tape Dimensions(mm)					
P0	P1	P2	D	E	F
4.0 ± 0.1	4.0 ± 0.1	2.0 ± 0.05	$\phi 1.5 \pm 0.1, -0$	1.75 ± 0.1	3.5 ± 0.05

NOTE

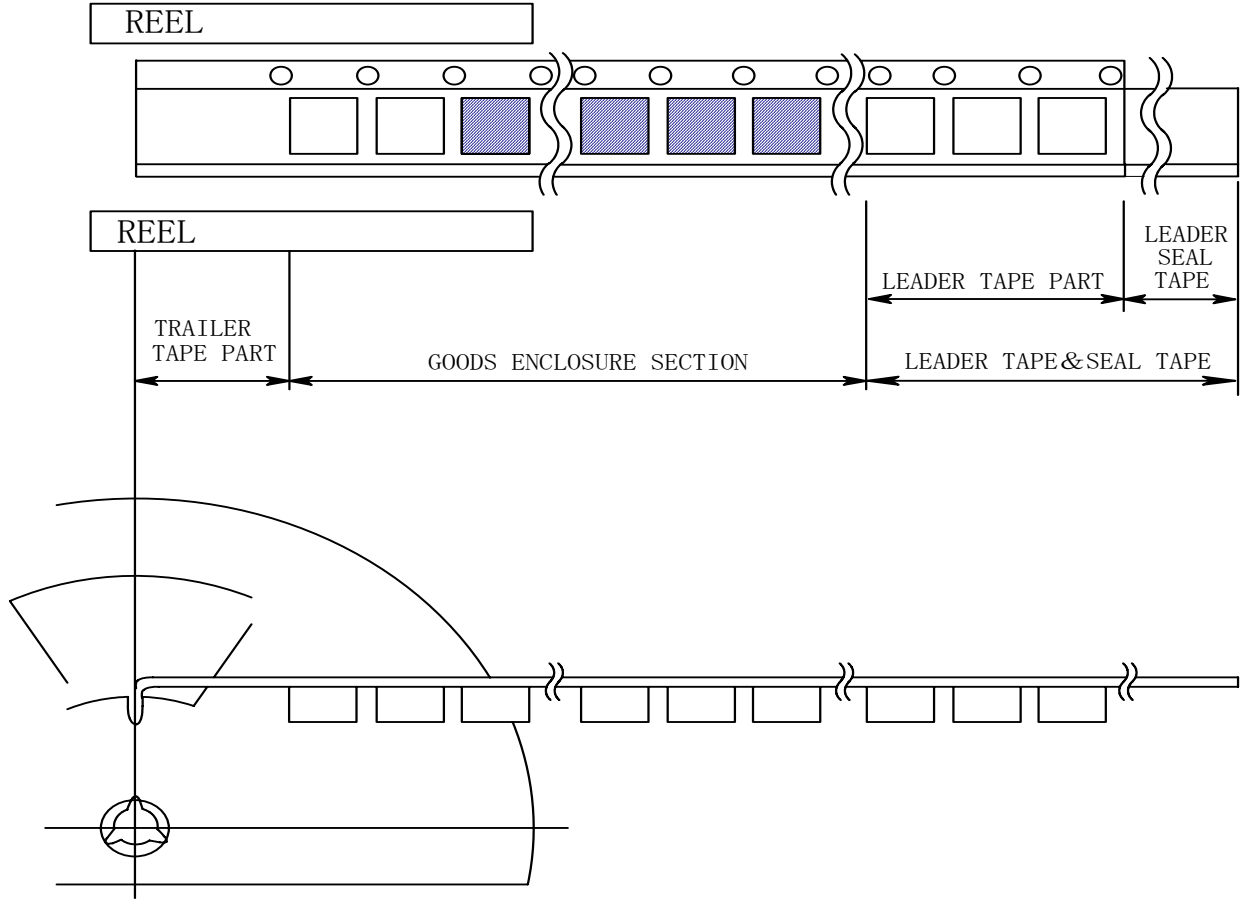
PACKAGE SPEC. No.

4/5

KB-CTR002

FIGURE 3 TAPE DIRECTION, LEADER, TRAILER SECTION DIMENSION

LEADER TAPE & SEAL PART	MIN.400mm
LEADER TAPE PART	MIN.100mm
TRAILER TAPE PART	MIN.160mm

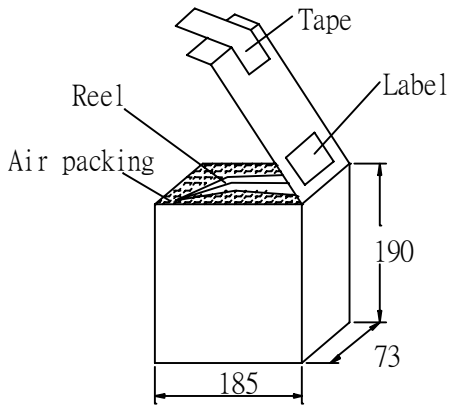


10. OUTER PACKING

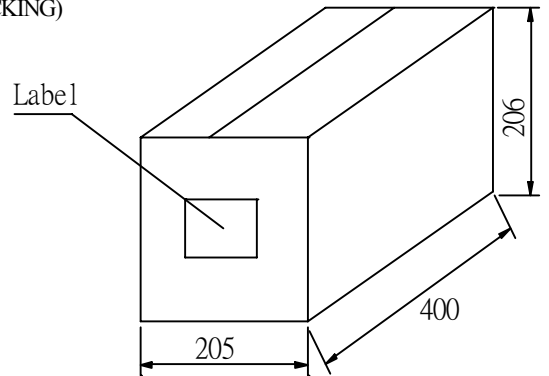
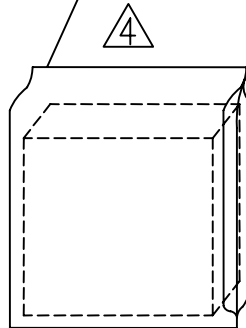
INNER BOX DIMENSION(REF.):

VACUUM PACKING:

OUTER CARTON DIMENSION(REF.):



PLASTIC BAG(VACUUM PACKING)



△ (5 REELS / BOX; 2 DESICCANT / BOX)

(5 BOXES / CARTON)

NOTE

PACKAGE SPEC. No.

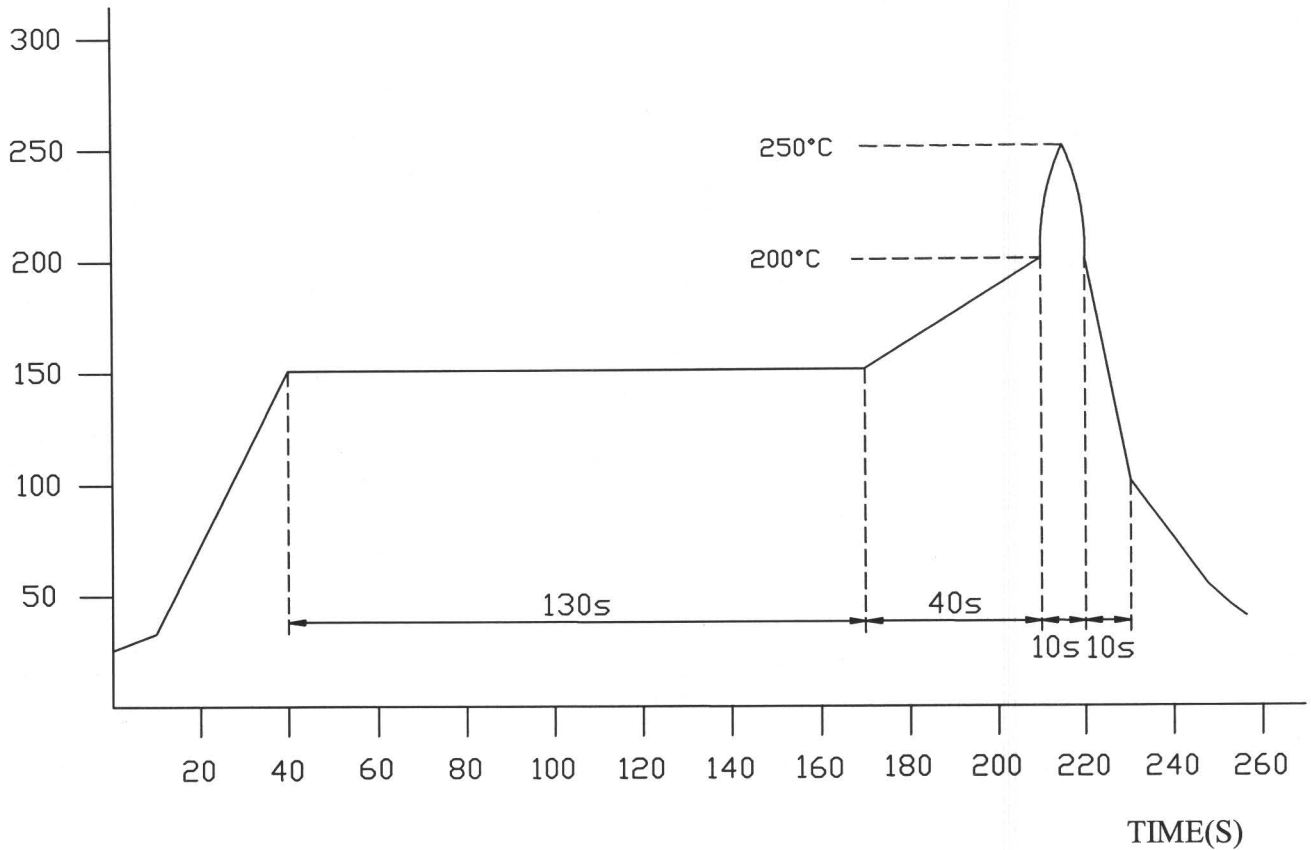
5/5

KB-CTR002

THE RECOMMENDED REFLOW CONDITION (LEAD FREE)

TEMPERATURE

°C

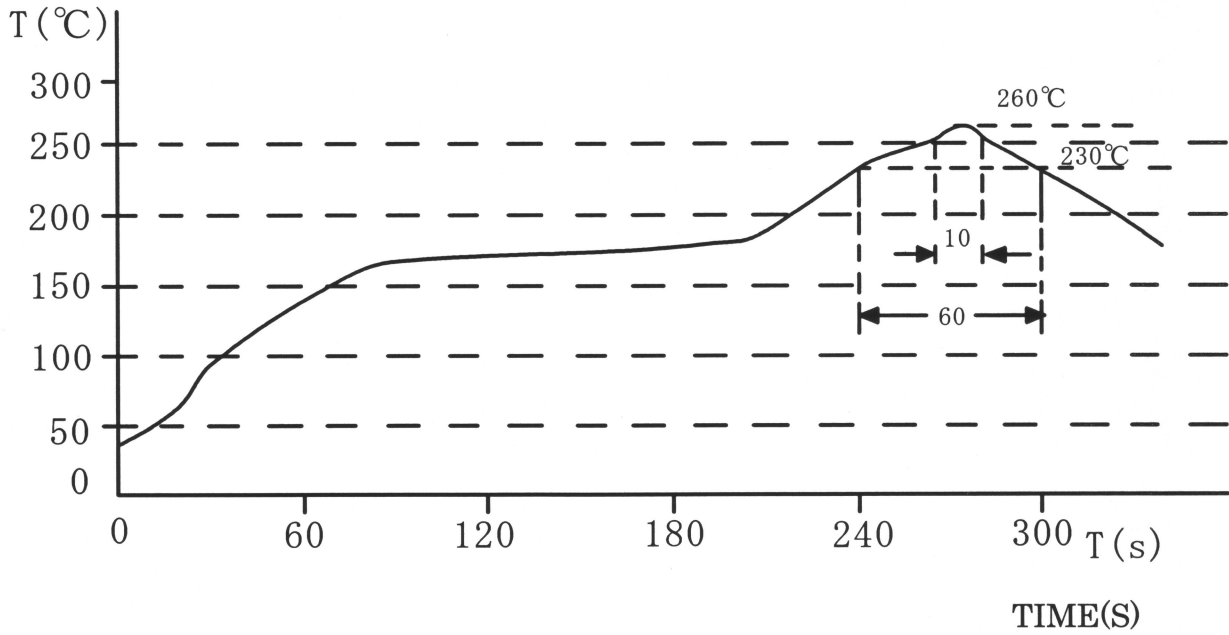


* THE REFLOW CONDITION RECOMMENDED ABOVE IS ACCORDING TO THE MACHINE USED BY OUR COMPANY. BIG DIFFERENCES WILL ARISE AS A RESULT OF THE TYPE OF MACHINE, REFLOW CONDITIONS, METHOD, ETC USED. HENCE, BEFORE SETTING UP YOUR REFLOW CONDITIONS, PLEASE CONFIRM WITH THE ABOVE. MOREOVER, PLEASE CLEAR ALL DOUBTS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

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

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
APPROVAL	CHECK	PREPARE		STD-002NP	