






承认书

SPECIFICATION FOR APPROVAL

CUSTOMER:			
CUSTOMER P/N:			
Cybermax P/N:	CMCW1608F220KTT		
DRAWN NO. :	CM19062102		
DATE:	19.06.21	REVISION NO.	A

Signature:

APPROVED BY	CHECKED BY	DRAWN BY
		
		



cybermaxtech.com

CMCW1608F220KTT

DATE	Chang Item

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SHAPE & DIMENSION (UNIT:mm)			
Marking Code:	Size:	Color:Green	typeface:

ELECTREICAL SPECIFICATION						
MEAS. ITEM	SPEC.				TEST FREQ.	CONDITIONS
L	22	μH	\pm	10%	2.5MHz/0.1V	$T_a=25^\circ\text{C}$, $I_{dc}=0\text{A}$
DCR	4.7	Ω	\pm	20%		$T_a=25^\circ\text{C}$
Isat	0.17	A	MAX		2.5MHz/0.1V	$\Delta L/L \leq 30\%$
Irms	0.20	A	MAX		2.5MHz/0.1V	$\Delta T \leq 40^\circ\text{C}$
GENERAL SPECIFICATION						
Electrical specifications :		at 25°C				
Operation Temperature:		-40~+125°C				
Storage Temperature:		-40~+125°C				
(1)WIRE TYPE: $\varnothing 0.03\text{mm}$						
(2)WINDING: 69.5Ts(Ref.)						

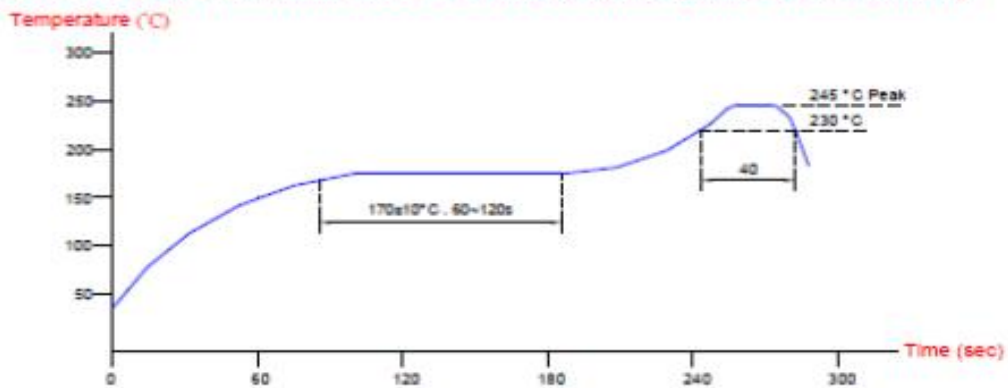
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Reliability Test			
No.	Item	Specification	Test Method
1	Temperature Shock.	Appearance: No damage. Inductance: within $\pm 10\%$ of initial.	Temperature: $-25 \pm 2^{\circ}\text{C} \sim +105 \pm 2^{\circ}\text{C}$ Kept for 30 minutes. Transition time : 5 minutes. 100 Cycles.
2	Humidity Resistance.	Appearance: No damage. Inductance: within $\pm 10\%$ of initial.	Temperature: $40 \pm 2^{\circ}\text{C}$. Relative Humidity: 90%. Duration: 500 +4/-0 hours.
3	High Temperature Resistance.	Appearance: No damage. Inductance: within $\pm 10\%$ of initial.	Temperature: $105 \pm 2^{\circ}\text{C}$. Duration: 1000 +4/-0 hours.
4	Low Temperature Resistance.	Appearance: No damage. Inductance: within $\pm 10\%$ of initial.	Temperature: $-25 \pm 2^{\circ}\text{C}$. Duration: 1000 +4/-0 hours.
5	Vibration test.	Appearance: No damage. Inductance: within $\pm 10\%$ of initial.	Oscillation Frequency: 10Hz to 55Hz to 10Hz in 60 seconds as a period. Total amplitude: 1.5mm. Testing Time: a period of 2 hours in each 3 mutually perpendicular directions (total of 6 hours).
6	Solderability Heat test.	Appearance: No damage. Inductance: within $\pm 10\%$ of initial.	Solder temperature: $260 \pm 5^{\circ}\text{C}$. Duration: 5 sec. Allowed reflow time: 2 times.
7	Solderability test.	90% or more of electrode area shall be coated by new solder.	Preheating: 160°C , 60sec. Solder temperature: $245 \pm 5^{\circ}\text{C}$. Duration : 5 sec.
8	Flexure Strength.	No visible mechanical damage.	Flexure: 2mm. Pressurizing Speed: 0.5mm/sec. Keep time: 30 ± 1 sec.
9	Terminal Strength.	No visible mechanical damage.	Force: 0.45Kg for 0603 series. Force: 0.9Kg for 0805 series. Force: 1.8Kg for 1008 series above. Keep time: 5 sec, X, Y direct.

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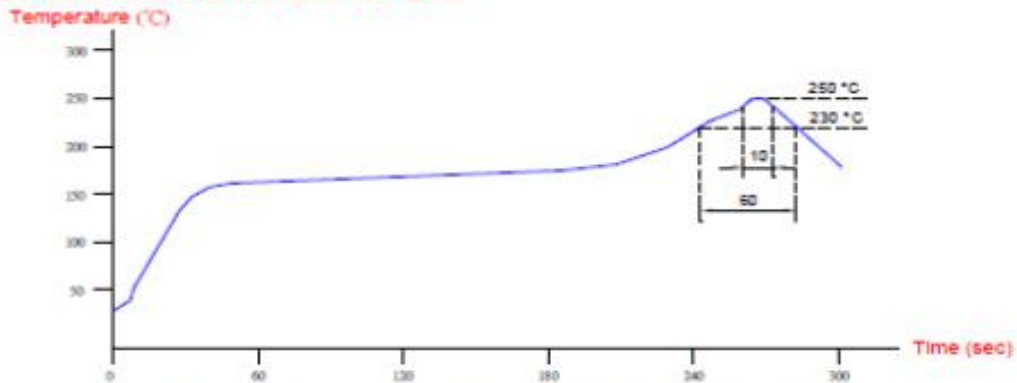
REFLOW -PROFILE

Lead-free the recommended reflow condition(temperature chart)



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.

Lead-free heat endurance test



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. 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 Arlitech.

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B.O.M

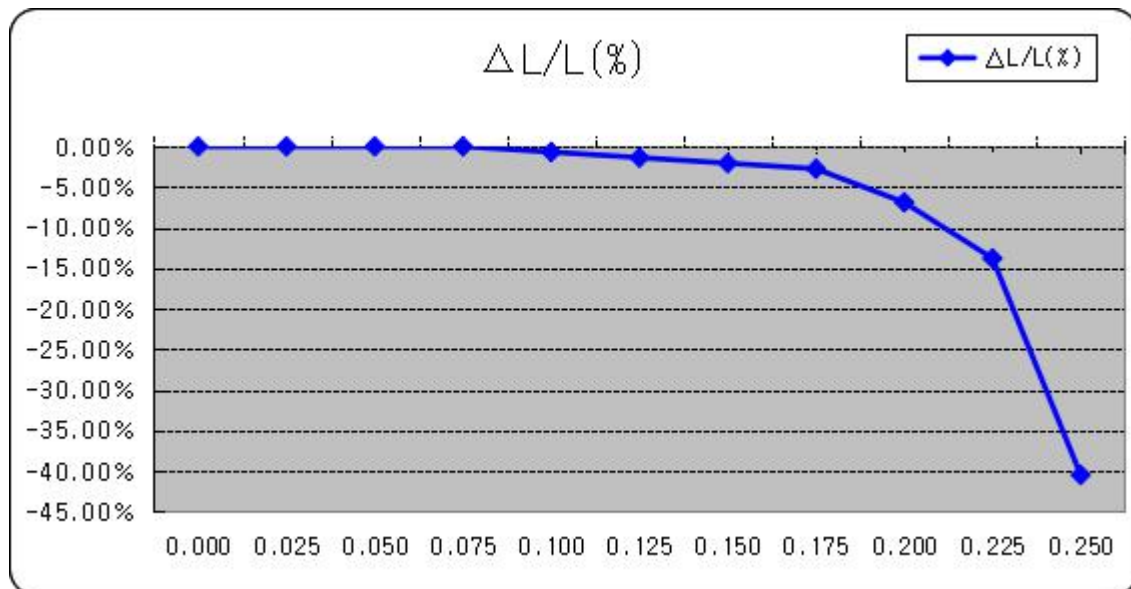
项目名称	型号及规格	制造商	环保要求
磁芯 (DRUM CORE)	MF801SWI1608C050A-LS	佳叶	RoHS
线材 (WIRE)	P180G1-0.03mm	益利素勒	RoHS
胶水 (GLUE)	UV-523	贺盛	RoHS

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Isat(飽和電流):電感瞬間的突波電流

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TME(秒)	Lsat(A)	L(UH)	$\Delta L/L(\%)$
1	0.000	22.5	0.00%
1	0.025	22.5	0.00%
1	0.050	22.5	0.00%
1	0.075	22.5	0.00%
1	0.100	22.4	-0.69%
1	0.125	22.3	-1.38%
1	0.150	22.2	-2.07%
1	0.175	22.1	-2.76%
1	0.200	18.5	-6.90%
1	0.225	16.5	-13.79%
1	0.250	14.6	-40.48%



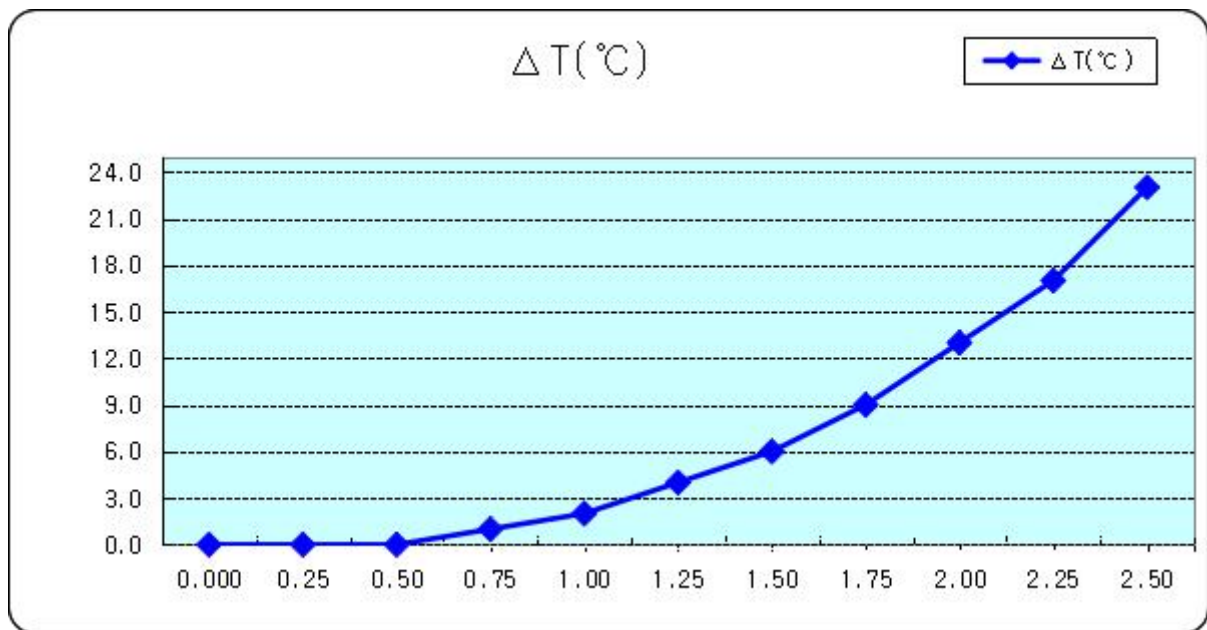
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TIME(S)	Irms(A)	L(uH)	$\Delta L/L(\%)$	Temp($^{\circ}C$)	$\Delta T(^{\circ}C)$
30	0.000	21.80	0.00%	29.0	0.0
30	0.25	21.80	0.00%	29.0	0.0
30	0.50	21.80	0.00%	29.0	0.0
30	0.75	21.70	-0.68%	30.0	1.0
30	1.00	21.70	-0.68%	31.0	2.0
30	1.25	21.60	-1.35%	33.0	4.0
30	1.50	21.50	-2.03%	35.0	6.0
30	1.75	21.30	-3.38%	38.0	9.0
30	2.00	20.80	-6.76%	42.0	13.0
30	2.25	17.70	-20.95%	46.0	17.0
30	2.50	12.27	-57.64%	52.0	23.0



※DC bias current characteristics in the ambient temperature 25 $^{\circ}C$ Frequency 2.5MHz/0.1V



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TEST DATA FOR PREPRODUCTION SAMPLE

TEST RESOLUTION					DIMENSION (Unit: mm)		
MEAS.	L	D.C.R			长	宽	高
ITEM	μH	Ω			mm	mm	mm
SPEC.	22	4.7			1.80Max	1.20Max	1.0Max
	±	±					
	10%	20%					
TEST	2.5MHz/0.1		Isat	ΔL/L ≤ 30%			
FREQ.	V		0.17A				
1	23.1	4.67	21.6	-6.5%	1.63	1.04	0.98
2	23.1	4.64	21.6	-6.5%	1.65	1.05	0.96
3	23.2	4.67	22.3	-3.9%	1.64	1.08	0.97
4	23.3	4.62	21.4	-8.2%	1.68	1.03	0.96
5	22.5	4.67	21.7	-3.6%	1.69	1.07	0.99
6	23.0	4.75	21.3	-7.4%			
7	22.6	4.75	21.5	-4.9%			
8	23.4	4.70	21.8	-6.8%			
9	23.8	4.69	21.8	-8.4%			
10	22.9	4.68	21.9	-4.4%			
AVG.	23.090	4.7	21.690	-6.04%			
R	1.3	0.13	1.60	-4.20%			

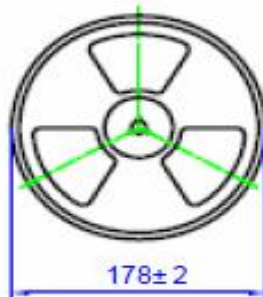
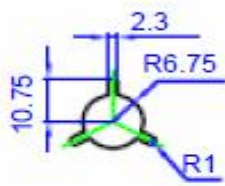
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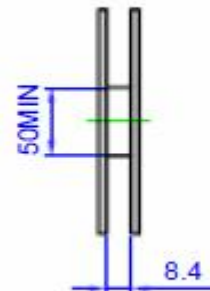
PACKAGING

热封包装

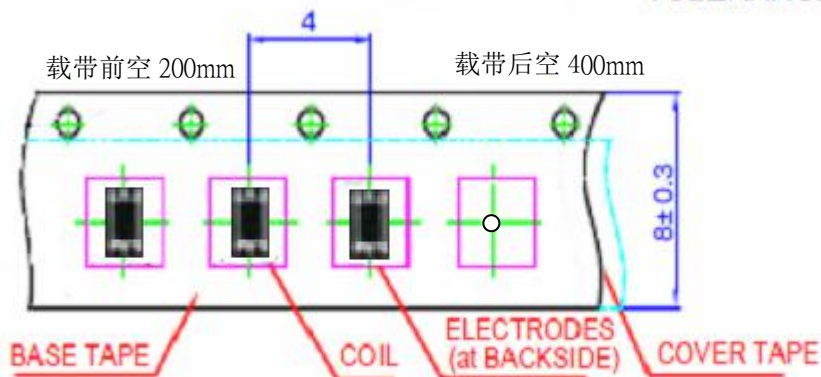
Reel dimensions



UNIT:mm



Tape dimensions

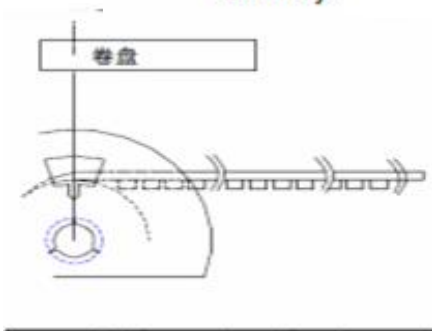


UNIT:mm

TOLERANCE:±0.1

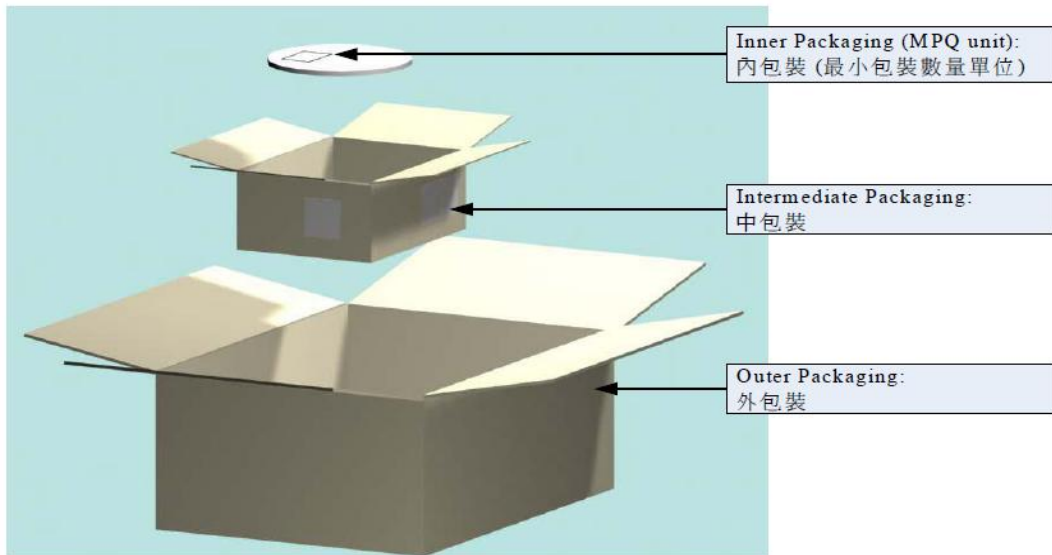
Packaging

Quantity: **4000** pcs/reel



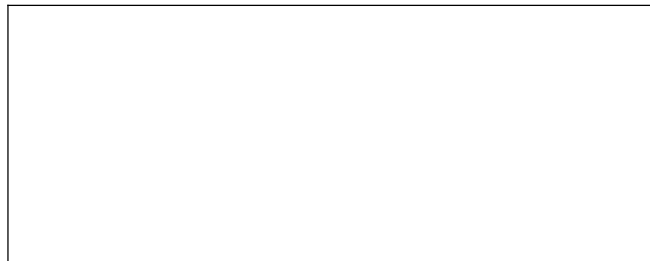
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PACKAGING



- 1.1 外箱: 39*38*18.5 cm 一箱裝 8 內箱
- 1.2 內箱: 18.7*18.4*8.3 cm 一箱裝 5 卷制品
- 1.3 外箱材質: A 三 A
- 1.4 內箱材質: A=A
- 1.5 每 5 卷制品用一只静电袋包裝
- 1.6 每一静电袋內放一只袋干燥剂
- 1.7 每一卷上面依标签样式的要求贴上标签明细
- 1.8 出货内外箱贴上该箱內实际内容明细
- 1.9 出货标签规格如下: 尺寸=长度:39mm 宽度:29mm

(如: 客戶有特殊要求時, 則依客戶要求實施.)



备注: 如果捆包数量小于内箱捆包数量时就用内箱包装