



SPECIFICATION FOR APPROVAL

DATE : June 14, 2008

SAMPLE Q'TY 10 PCS

CUSTOMER : ACUWA

CUSTOMER P/N: AF-009

MFILTER P/N : TM1603D

DESCRIPTION : 10/100 BASE-TX MODULES TRANSFORMER

APPROVED SIGNATURES	
MFILTER APPROVED SIGNATURES	CUSTOMER APPROVED SIGNATURES
APPROVED BY : 唐海英	APPROVED BY :
DATE : 2008-06-14	DATE :
APPROVED No. :	APPROVED No. :

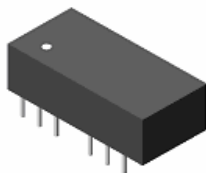
MFILTER(KAI PING) ENTERPRISE INC.

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Feature



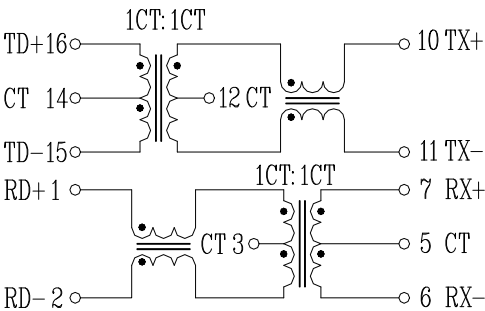
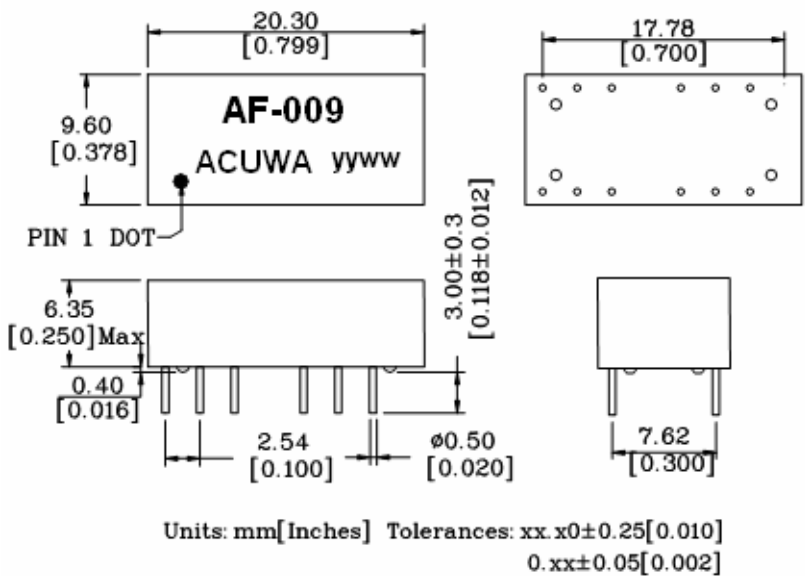
- ◆ Operating temperature range : 0℃ to +70℃.
- ◆ Storage temperature range : 0℃ to +125℃.

Electrical Specifications @ 25℃							
Part Number	Turns Ratio		HI-POT (Vrms)	Rise Time 10-90% (ns Typ)	Insertion Loss (dB Max) 0.1-125MHz	Cross talk (dB Min)	
	TX	RX				0.1-60MHz	60-100MHz
TM1603D	1CT : 1CT	1CT : 1CT	1500	2.5	-1.1	-40	-38

Continue				
Part Number	Return Loss TX/RX(dB Typ)		CMRR TX/RX (dB Min)	
	0.1-60MHz	60-100MHz	0.1-60MHz	60-100MHz
TM1603D	-18/-17	-13/-15	-42/-40	-40/-35

Mechanical

Schematic



M FILTER ELECTRONIC CORP.

SAMPLES TEST REPORT

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CUSTOMER	ACUWA		CUST P/N			AF-009				
ITEM	TRANSFORMER		DESCRIPTION			TM1603D				
PART NO.	208-00110		DATE			2008-06-14				
ITEM	TEST CONDITION @ 25℃	SAMPLES NO. TEST PIN	1	2	3	4	5	SPECIFICATION		
								Min	Typ	Max
OCL (uH)	100KHz/0.1Vrms With 8mA DC Bias	1-2=7-6	502	534	601	615	514	350		
		11-10=15-16	573	542	571	575	592			
L/L (uH Max)	100KHz/ 0.1Vrms	16-15(10-11)	0.23	0.24	0.21	0.23	0.23			0.5
		6-7(1-2)	0.25	0.23	0.24	0.23	0.23			
CW/W (pF Max)	100KHz/ 0.1Vrms	12 to 14	19.2	18.2	20.2	20.3	20.5			28
		5 to 3	21.8	18.9	20.5	19	20.4			
DCR (ohm Max)		10-11	0.73	0.77	0.79	0.76	0.75			1.1
		1-2	0.77	0.74	0.75	0.75	0.77			
HI-POT(Vrms)	1500Vrms/0.5mA	PRI/SEC	PASS	PASS	PASS	PASS	PASS	1S		
TURN RATIO	100KHZ/0.1V	16-15 : 10-11	1.00	1.00	1.00	1.00	1.00	1CT : 1CT		
		1-2 : 7-6	1.00	1.00	1.00	1.00	1.00	1CT : 1CT		
Cross talk (dB Min)	0.1-60MHz	1-2 to 7-6 16-15 to10-11	-60.5	-61.3	-59.4	-60.0	-59.8	-40		
	60-100MHz		-50.5	-50.2	-51.3	-51.8	-52.0	-38		
CMRR TX/RX (dB Min)	0.1-60MHz	TX	-58.2	-58.6	-58.3	-59.2	-59.8	-42/-40		
		RX	-56.7	-56.9	-57.7	-57.2	-55.2			
	60-100MHz	TX	-49.1	-49.7	-49.8	-48.9	-47.1	-40/-35		
		RX	-48.2	-48.5	-49.6	-47.9	-47.8			
Return loss (dB Min)	0.1-60MHz	TX	-25.1	-26.8	-25.8	-25.6	-24.8		-18/-17	
		RX	-24.9	-24.5	-24.7	-25.3	-25.5			
	60-100MHz	TX	-18.2	-18.5	-19.7	-19.2	-18.7		-13/-15	
		RX	-18.4	-18.7	-18.9	-19.5	-17.8			
Insertion loss (dB Max)	0.1-125MHz	TX	-0.85	-0.87	-0.80	-0.89	-0.83			-1.1
		RX	-0.79	-0.88	-0.89	-0.78	-0.72			
REMARK:		Approved by:		Checked by:			Drawn by:			
		唐海英					馬永濤			

M FILTER ELECTRONIC CORP.

SAMPLES TEST REPORT

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CUSTOMER	ACUWA		CUST P/N			AF-009				
ITEM	TRANSFORMER		DESCRIPTION			TM1603D				
PART NO.	208-00110		DATE			2008-06-14				
ITEM	TEST CONDITION @ 25℃	SAMPLES NO. TEST PIN	6	7	8	9	10	SPECIFICATION		
								Min	Typ	Max
OCL (uH)	100KHz/0.1Vrms With 8mA DC Bias	1-2=7-6	534	547	555	520	511	350		
		11-10=15-16	538	549	581	532	544			
L/L (uH Max)	100KHz/ 0.1Vrms	16-15(10-11)	0.23	0.24	0.21	0.23	0.23			0.5
		6-7(1-2)	0.25	0.23	0.24	0.23	0.23			
CW/W (pF Max)	100KHz/ 0.1Vrms	12 to 14	19.2	18.2	20.2	20.3	20.5			28
		5 to 3	21.8	18.9	20.5	19	20.4			
DCR (ohm Max)		10-11	0.73	0.77	0.79	0.76	0.75			1.1
		1-2	0.77	0.74	0.75	0.75	0.77			
HI-POT(Vrms)	1500Vrms/0.5mA	PRI/SEC	PASS	PASS	PASS	PASS	PASS	1S		
TURN RATIO	100KHZ/0.1V	16-15 : 10-11	1.00	1.00	1.00	1.00	1.00	1CT : 1CT		
		1-2 : 7-6	1.00	1.00	1.00	1.00	1.00	1CT : 1CT		
Cross talk (dB Min)	0.1-60MHz	1-2 to 7-6 16-15 to10-11	-60.5	-61.3	-59.4	-60.0	-59.8	-40		
	60-100MHz		-50.5	-50.2	-51.3	-51.8	-52.0	-38		
CMRR TX/RX (dB Min)	0.1-60MHz	TX	-58.2	-58.6	-58.3	-59.2	-59.8	-42/-40		
		RX	-56.7	-56.9	-57.7	-57.2	-55.2			
	60-100MHz	TX	-49.1	-49.7	-49.8	-48.9	-47.1	-40/-35		
		RX	-48.2	-48.5	-49.6	-47.9	-47.8			
Return loss (dB Min)	0.1-60MHz	TX	-25.1	-26.8	-25.8	-25.6	-24.8		-18/-17	
		RX	-24.9	-24.5	-24.7	-25.3	-25.5			
	60-100MHz	TX	-18.2	-18.5	-19.7	-19.2	-18.7		-13/-15	
		RX	-18.4	-18.7	-18.9	-19.5	-17.8			
Insertion loss (dB Max)	0.1-125MHz	TX	-0.85	-0.87	-0.80	-0.89	-0.83			-1.1
		RX	-0.79	-0.88	-0.89	-0.78	-0.72			
REMARK:		Approved by:		Checked by:			Drawn by:			
		唐海英					馬永濤			

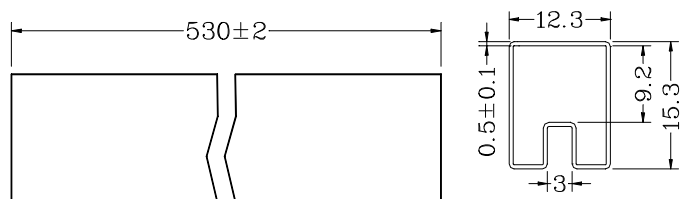


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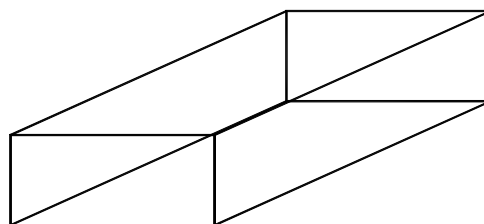
SAMPLES PACK SPECIFICATIONS

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CUSTOMER	ACUWA	CUST P/N	AF-009
ITEM	TRANSFORMER	DESCRIPTION	TM1603D
PART NO.	208-00110	DATE	2008-06-14

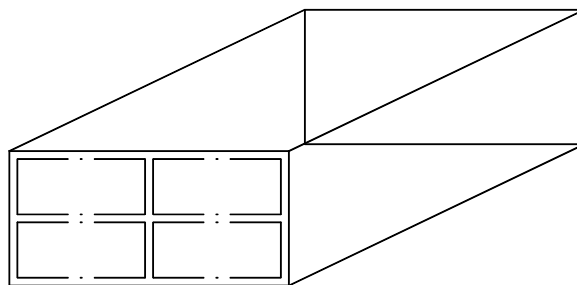
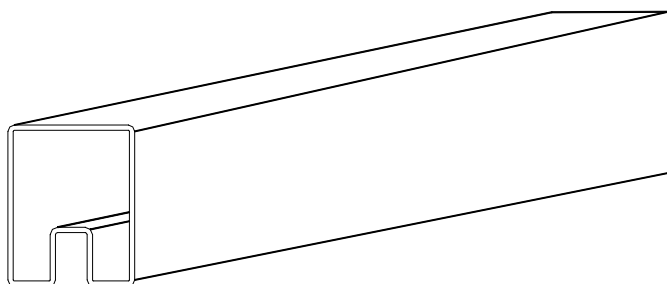


Units:mm Tolerances: xx.xx0±0.25



TUBE MECHANICAL DIMENSION

INNER CARTON : 54.5*16.5*7.5cm



TUBE =25 PCS

INNER CARTON=50 TUBE=50*25=1250

EXPORT CARTON=4INNER CARON=4*1250=5000 PCS

EXPORT CAPTON : 56.5*34.5*17.5cm

REMARK:

Approved by:

唐海英

Checked by:

Drawn by:

馬永濤