

SPECIFICATION FOR APPROVAL



CUSTOMER: 安克华科技有限公司

DESCRIPTION: PLC COUPLING TRANSFORMERS

CUSTOMER P/N: AS-159

LIHUA P/N: DBM764-134T-C

TYPE: DBM764

SPEC. NO.: S-014-A0147-B

DATE: 28-Oct-2014

ISSUE BY		
APPROVED	CHECKED	DRAWN
 2014/10/28 GH Xiao	 2014/10/28 Jack Tao	 2014/10/28 Cindy Liu

CUSTOMER APPROVED BY		
APPROVED	CHECKED	DRAWN



LIHUA ELECTRONICS CORP.
中山立華電子廠

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Customer 安克华科技有限公司		Specification (Revisions)	Type DBM764
Symbol	Date	Revisions	Client
A	2014-10-28	新规作成	Jack Tao
B	2014-11-27	a) 增加立华品名: DBM764-134T-C b) 5.制作工序: 增加印字工序 c) 6.包装: 增加产品单重: 3.05g/pcs	Jack Tao
C	2015-5-21	HI-POT: PIN1 to PIN8:500VAC,1mA,2Sec. 追加	客户要求

Note: This specification is subject to change without notice for improvement. It is requested that confirmation is made when ordering.	Spec. No. S-014-A0147-B
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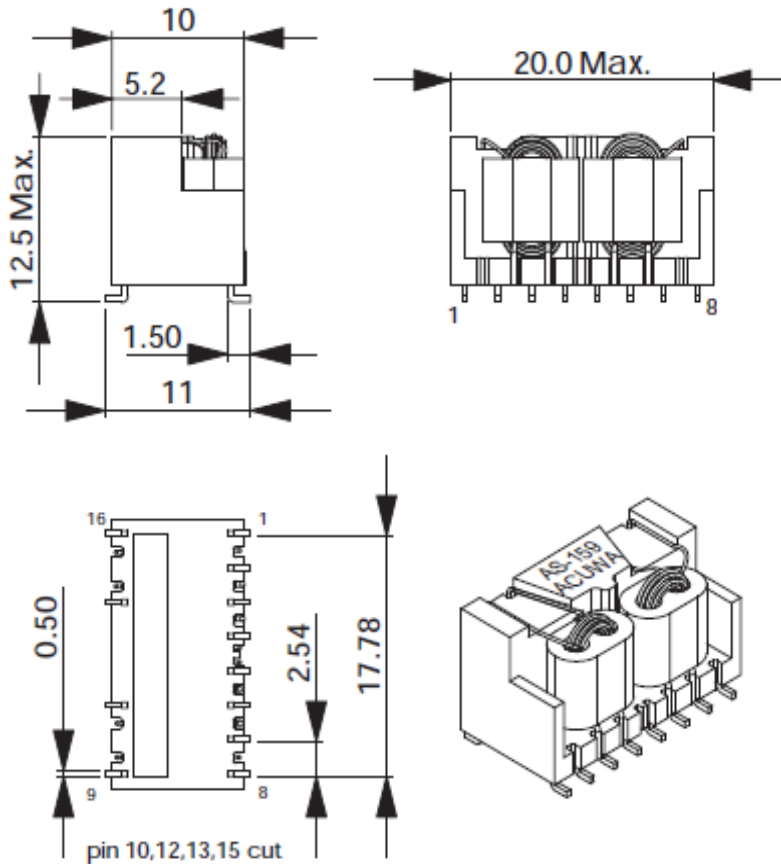
S P E C I F I C A T I O N

Customer: 安克华科技有限公司

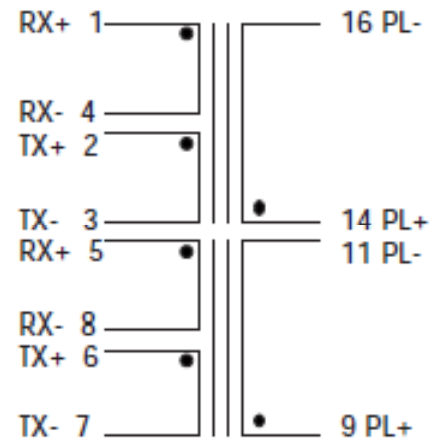
Type: DBM764

1. Appearance

1-1.Dimension (mm)



2.Connection (Bottom view)



Unless otherwise specified all tolerances are +/-0.25

3.Electrical characteristics (20°C ambient)



Winding	Pin No.	Turns	Wire	L (μH) [Typ.] @2MHz	D.C.R (mΩ) [Max.]	Turns Ration (TX:RX:PL)
TX	2-3,6-7	1T	1UEWN/U-0.50mm NTL	1.4	10	1:4:3
RX	1-4,5-8	4T	0UEWF-0.20mm NTL	23	60	
PL	9-11,14-16	3T	T1WW-F-0.20mm	11.7	50	

※ FREQUENCY RANGE : 2 TO 30 MHz.

※ TX LEAKAGE INDUCTANCE(@2MHz ,PL WINDING SHORTED) : 15nH

※ HI-POT(PL to TX & RX) : 3000VAC, 1mA, 2Sec. or 4250VDC,1mA,2Sec; (TX to RX) : 500VAC, 1mA, 2Sec.

※ 量产L值测试条件: 100kHz,0.1V

Approved	Checked	Drawn	Customer P/N	AS-159	
			LIHUA P/N	DBM764-134T-C 	
			Type code	01146	Spec. No.: S-014-A0147-B
			Date	2014-10-28	

S P E C I F I C A T I O N

Customer: 安克华科技有限公司	Type: DBM764
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4.Bill of Materials

No.	Description	Part name	Dosage	Unit	Supplier
01	Core	SL5 RID 7x6x4 H1.8	1.0000	pcs	昱欣
02	Wire	P155 0UEW-0.20mm NTL	15.0000	Cm	益力索勒
03	Wire	1UEWN/U-0.50mm NTL 155℃	8.0000	Cm	太平洋
04	Wire	T1WW-F-0.20mm	15.0000	Cm	宝利通
05	Bobbin	YQH-101	1.0000	pcs	丰强电了
06	Solder	BSD807-B	0.0100	g	博士达
07	Flux	F-308C	0.0100	g	剑鑫

5.制作工序

- 5-1) 裁线
- 5-2) 穿线
- 5-3) 组装挂脚 (磁芯+Bobbin组装)
- 5-4) 三层绝缘线预焊锡
- 5-5) 焊锡
- 5-6) 测Hi-pot: 先测3200Vac,后测500V.
- 5-7) 测L值
- 5-8) 印字(白色字体)
- 5-9) 外观检查
- 5-10) 包装(吸塑管装)

6.包装

- 6-1) 内盒尺寸: 长x宽x高=540mm x 160mm x 70mm
- 6-2) 外箱尺寸: 长x宽x高=565mm x 350mm x 170mm
- 6-3) 吸塑套管: 25pcs/支
- 6-4) 40支套管/1内盒=1000PCS.
- 6-5) 一外箱装4内盒 = 4000PCS.
- 6-6) 产品单重: 3.05g/pcs

Note:	Spec. No.: S-014-A0147-B
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S P E C I F I C A T I O N

Customer:	安克华科技有限公司	Type:	DBM764
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7.Test data

Part No.: DBM764-134T-C			Subject:Electric&Dimension				Date: 2014-10-28		
Measuring instrument(s): ☒ Tonghui TH2819A LCR ☐ Tonghui TH7133 ☐ TH2882A Impulse Winding Tester ☐ Zentech 9072A ☐ Agilent 4395A ☐ Agilent 4284A ☐ Micrometer ☐ Agilent 4194A ☐ Caliper ☐ TMS							Quantity:		
							10 pcs		
							Temperature:		
							25 °C		
							Humidity:		
							28 %		
Test item	L (TX) 100kHz,0.1V	DCR (TX)	L (RX) 100kHz,0.1V	DCR (RX)	L (PL) 100kHz,0.1V	DCR (PL)	Hi-pot (PL to TX & RX)	Hi-pot (TX to RX)	
Con.	μH	mΩ	μH	mΩ	μH	mΩ	1mA,2Sec.	1mA,2Sec.	
No.	1.4 Typ.	10 Max.	23 Typ.	60 Max.	11.7 Typ.	50Max.	4250VAC	500VAC	
1	1.36	5.20	23.96	45.6	13.44	38.5	OK	OK	
2	1.32	5.10	23.69	45.8	13.20	36.6	OK	OK	
3	1.33	5.20	22.84	45.7	12.80	38.5	OK	OK	
4	1.37	5.00	23.02	46.2	12.88	36.7	OK	OK	
5	1.34	5.10	22.73	44.8	12.74	37.8	OK	OK	
6	1.42	5.20	23.88	44.5	13.39	37.60	OK	OK	
7	1.34	5.20	22.87	45.2	12.83	36.50	OK	OK	
8	1.38	5.10	23.24	44.8	13.04	37.20	OK	OK	
9	1.28	5.20	22.16	45.1	12.43	36.80	OK	OK	
10	1.35	5.20	23.20	45.0	13.00	36.40	OK	OK	
X Bar	1.349	5.150	23.159	45.270	12.975	37.260	OK	OK	
MAX	1.420	5.200	23.960	46.200	13.440	38.500			
MIN	1.280	5.000	22.160	44.500	12.430	36.400			
R	0.140	0.200	1.800	1.700	1.010	2.100			
Note:									
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							S-014-A0147-B		

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						Temperature: 25 °C			
						Humidity: 65 %			
Test item	A	B	C	D	E				
Con.	mm	mm	mm	mm	mm				
No.	20.0 Max.	11±0.25	12.5 Max.	2.54±0.10	0.50±0.15				
1	20.02	11.18	12.38	2.52	0.55				
2	20.02	11.27	12.32	2.53	0.56				
3	19.98	11.20	12.36	2.54	0.58				
4	19.99	11.15	12.37	2.53	0.57				
5	19.98	11.12	12.38	2.54	0.55				
6	20.01	11.16	12.35	2.52	0.56				
7	19.97	11.15	12.36	2.54	0.59				
8	19.98	11.18	12.35	2.53	0.57				
9	20.02	11.20	12.37	2.54	0.56				
10	19.98	11.15	12.36	2.53	0.54				
X Bar	19.995	11.176	12.360	2.532	0.563				
MAX	20.020	11.270	12.380	2.540	0.590				
MIN	19.970	11.120	12.320	2.520	0.540				
R	0.050	0.150	0.060	0.020	0.050				
Note:									
Note:							Spec. No. S-014-A0147-B		

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8. General characteristics

8-1.Storage temperature range : $-40^{\circ}\text{C} \sim +65^{\circ}\text{C}$

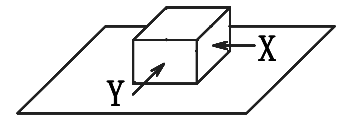
8-2.Operating temperature range: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$ (Including coil's self temperature rise)

8-3.External appearance : No external defects can be found in the visual inspection.

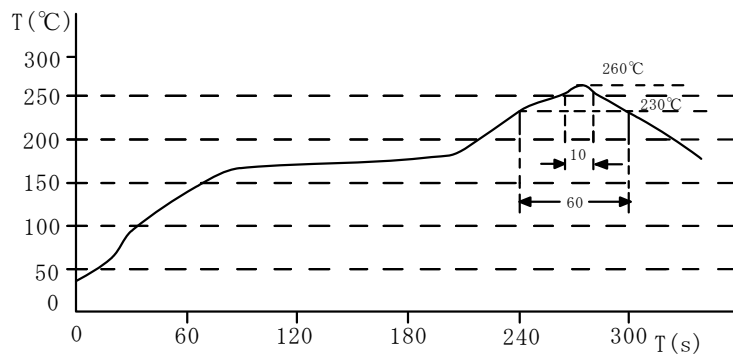
8-4.Storage period of packed product :

The storage period of the packed product is within 6 months after the production. The storage environment is that there are no caustic factors and dew condensation, surrounding temperature is $5 \sim 40^{\circ}\text{C}$ and relative humidity is $20 \sim 70\%$.

8-5.Electrode strength : No electrode detachment should be found when the device is pushed the device is pushed in two directions of X and Y with the force of 5N for 10 ± 1 seconds x after soldering between copper plate and the electrodes. (Refer to figure below) t



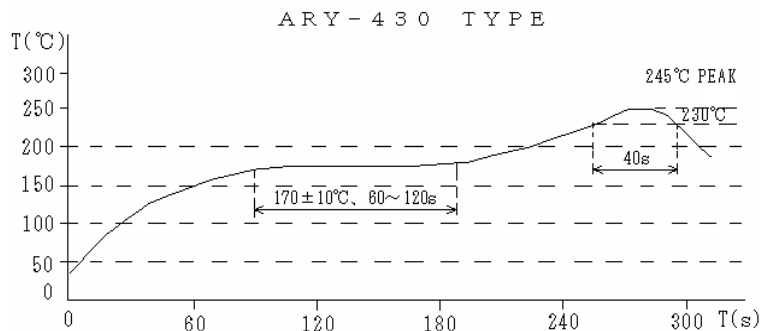
8-6.Heat endurance test :



8-6-1.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.

8-6-2.The reflow test can be done twice,but the interval should be more than one hour under the normal.

8-7.Recommended reflow condition:(Temperature chart)



8-7-1.The reflow condition recommended above is according to the machine used our company.Big differences will arise as result of the type of machine,reflow conditions,method,ETC,used. Hence,be fore setting up your reflow conditions,please confirm with the above.

8-7-2. Moreover,please clear all doubts with our company before starting.

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