

SPECIFICATION FOR APPROVAL



CUSTOMER: 安克华

DESCRIPTION: SMD Directional Coupler

CUSTOMER P/N: AS-157B

LIHUA P/N: SBM43D2-157B

TYPE: SBM43D

SPEC. NO.: S-016-C0061

DATE: 17-May-2016

ISSUE BY		
APPROVED	CHECKED	DRAWN

CUSTOMER APPROVED BY		
APPROVED	CHECKED	CHECKED



LIHUA ELECTRONICS CORP.
中山立華電子廠

ADD:廣東省中山市板芙鎮板芙北路152号
TEL:86-0760-86603706 FAX:86-0760-86515319
E-MAIL:zslhdz@163.com
<http://www.zslhdz.cn>

Customer 安克华		Specification (Revisions)	Type SBM43D
Symbol	Date	Revisions	Client

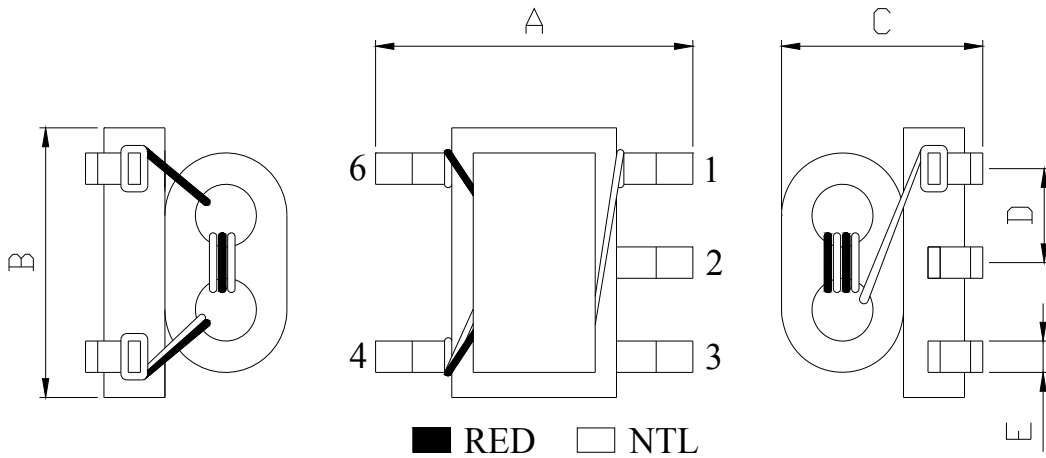
Note: This specification is subject to change without notice for improvement. It is requested that confirmation is made when ordering.	Spec. No. S-016-C0061
--	--------------------------

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

Customer: 安克华	Type: SBM43D
---------------	--------------

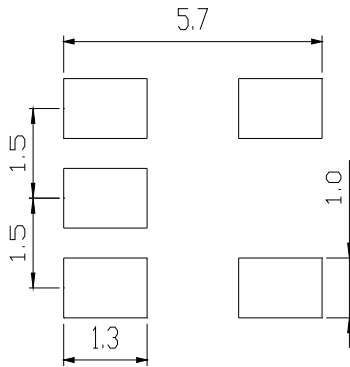
1. Appearance

1-1.Dimension (mm)



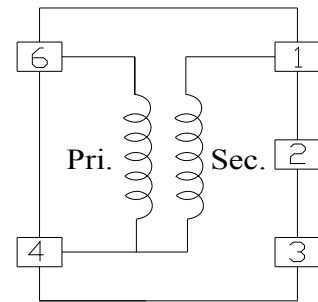
A	5.2±0.3
B	4.2±0.3
C	3.5Max.
D	1.5±0.2
E	0.50Ref.
F	
G	
H	

1-2.Recommended land pattern dimension (mm)



2. Coil specification

2-1.Connection



2-2.Electrical characteristics (20°C ambient)

Pin No.	Turns	Wire	Impedance Ratio Pri:Sec	Bandwidth (MHz)	Inertion Loss (dB) [Max.]	L (μH) [Typ.] PIN1-4 @100kHz,0.1V	D.C.R (mΩ) [Max.] PIN1-4
6-4	2T	1UEWF-0.12-RED	50:75	0.5-2200	3.0	1.8	45
1-4	2.5T	1UEWF-0.12-NTL					

Approved	Checked	Drawn	Customer P/N	AS-157B		
			LIHUA P/N	SBM43D2-157B		
			Type code		Spec. No.: S-016-C0061	
			Date	2016-5-17		

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

Customer: 安克华		Type: SBM43D
---------------	--	--------------

2-3.Bill of materials

序号	材料	料号	用量	供应商
01	磁芯	R5B RID 2x1.6x3.5 H1.0	1pcs	莱洋
02	线材	1UEWF-0.12mm-NTL	12Cm	益力索勒
03	线材	1UEWF-0.12mm-RED	12Cm	益力索勒
04	BASE	DY-BASE-019-A	1pcs	东源
05	锡条	BSD807H-B(Sn/Cu0.7)	0.005g	博士达
06	助焊剂	F-308C	0.005g	剑鑫
07	胶水	6020H-6150	0.005g	惠利
08	包装带	CTP115-2075-RL-KJ	1.0375pcs	铠钜
09	上带	9.3mm 自粘带		庆联

Note:	Spec. No.: S-016-C0061
-------	---------------------------

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

Customer:	安克华	Type:	SBM43D
-----------	-----	-------	--------

3 .Test data

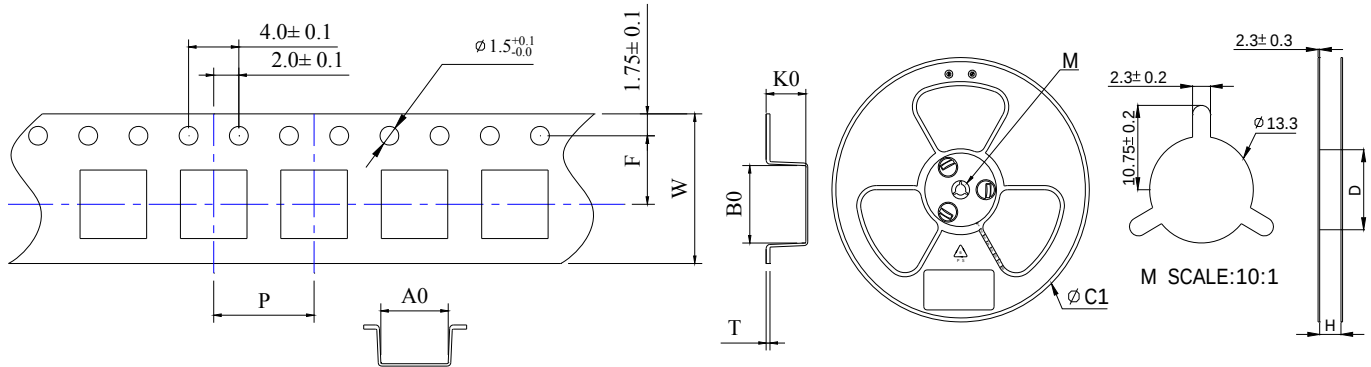
Part No.: SBM43D2-157B			Subject:Electric&Dimension			Date: 2016-5-17			
Measuring instrument(s): ☒ Tonghui TH2819A LCR ☐ Tonghui TH7133 ☐ TH2882A Impulse Winding Tester ☐ Zentech 9072A ☐ Agilent 4395A ☐ Agilent 4284A ☐ Micrometer ☐ TMS ☒ Caliper							Quantity:		
							10 pcs		
							Temperature:		
			25 °C						
						Humidity:			
						65 %			
Test item	L (PIN1-4)	DCR (PIN1-4)			A	B	C	D	E
Con.	μH	mΩ			mm	mm	mm	mm	mm
No.	1.8Typ.	45 Max.			5.2±0.3	4.2±0.3	3.5 Max.	1.5±0.2	0.50 Ref.
1	1.73	24.8			5.19	4.28	3.12	1.48	0.49
2	1.73	24.7			5.18	4.29	3.14	1.49	0.49
3	1.82	24.3			5.16	4.30	3.14	1.50	0.48
4	1.75	24.5			5.18	4.27	3.12	1.49	0.50
5	1.78	24.8			5.20	4.29	3.13	1.48	0.50
6	1.82	24.6			5.19	4.26	3.14	1.48	0.48
7	1.76	24.7			5.17	4.28	3.12	1.47	0.48
8	1.74	24.8			5.18	4.28	3.13	1.50	0.49
9	1.72	24.5			5.16	4.27	3.15	1.49	0.47
10	1.76	24.6			5.15	4.29	3.12	1.47	0.48
X Bar	1.761	24.630			5.176	4.281	3.131	1.485	0.486
MAX	1.820	24.800			5.200	4.300	3.150	1.500	0.500
MIN	1.720	24.300			5.150	4.260	3.120	1.470	0.470
R	0.100	0.500			0.050	0.040	0.030	0.030	0.030
Note:									
Note:							Spec. No.		
							S-016-C0061		

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

Customer: 安克华	Type: SBM43D
---------------	--------------

4. Packing specification

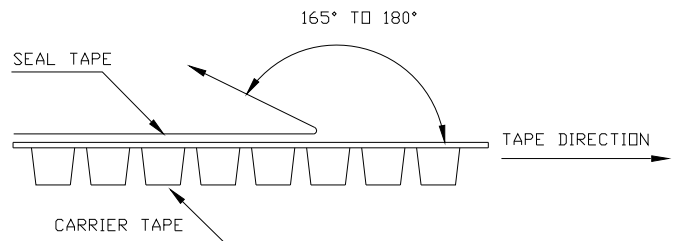
4-1.Tape dimension (mm)



W	A0	B0	K0	F	P	T	C1	D	H
12±0.3	4.5±0.1	5.5±0.1	3.5±0.1	5.5±0.05	8.0±0.1	0.4±0.05	φ330±1.0	100±1.0	12.5±0.2

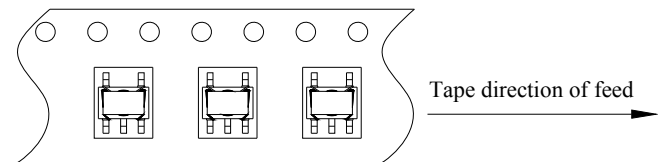
4-2.Taping

*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 0.5N to 1.3N.

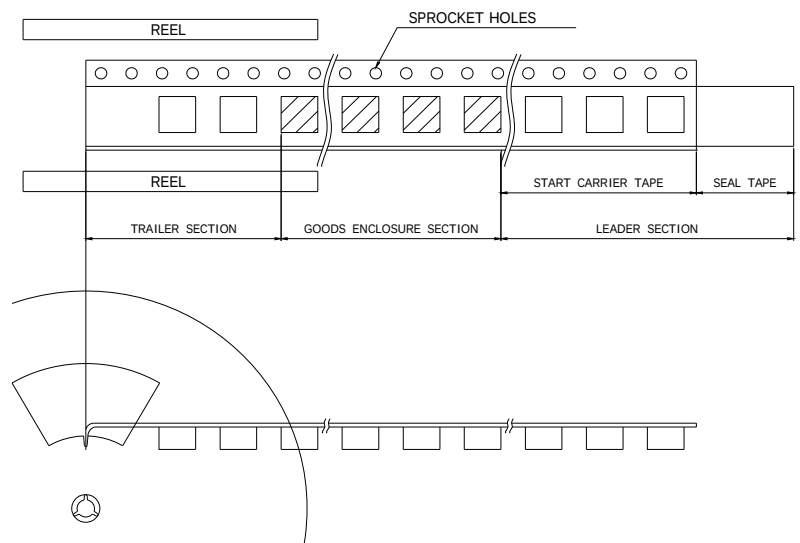


* Enclosing condition of coils.

The mark side is upward as the up illustration.



Leader section	400mm Min.
Carrier tape start size	100mm Min.
Trailer section size	160mm Min.
Quantity	2000pcs/Roll



Note:	Spec. No.: S-016-C0061
-------	------------------------

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

Customer: 安克华	Type: SBM43D
---------------	--------------

5. General characteristics

5-1.Storage temperature range : $-40^{\circ}\text{C} \sim +65^{\circ}\text{C}$

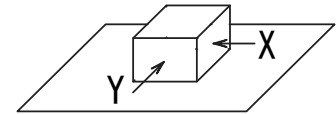
5-2.Operating temperature range: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$ (Including coil's self temperature rise)

5-3.External appearance : No external defects can be found in the visual inspection.

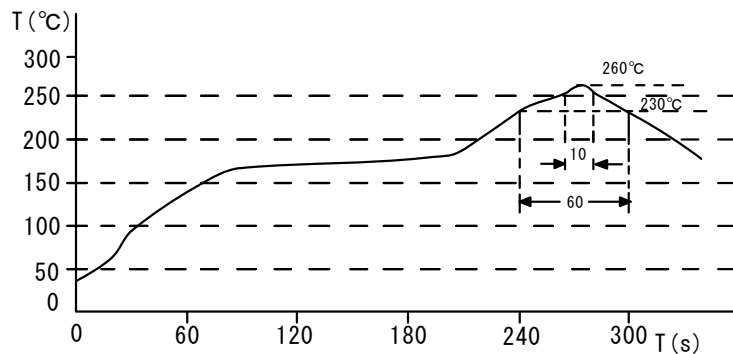
5-4.Storage period of packed product :

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 $20 \sim 70\%$.

5-5.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



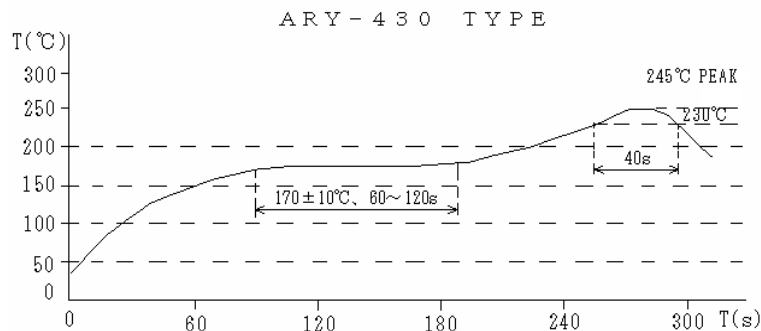
5-6.Heat endurance test :



5-6-1.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.

5-6-2.The reflow test can be done twice,but the interval should be more than one hour under the normal.

5-7.Recommended reflow condition:(Temperature chart)



5-7-1.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.

5-7-2. Moreover,please clear all doubts with our company before starting.

Note:	Spec. No.: S-016-C0061
-------	---------------------------