# P/N: FALCHB1016-270K

# **PAIRUI** www.fuantronics.net

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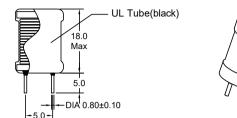
2

3

5

6

### Outline Dimensions(Unit:mm)



Orthographic view

Stereogram

C





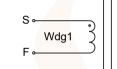
Top view

Bottom view

### REMARK:

1. Products need thermal shrinkable sleeve.

### **Electronical Schematic**



## Electrical Characteristics(@25°C)

Inductance 1KHz,0.1V S-F	DC R <mark>esistor</mark> S-F	Rated Current
27uH±10%	46mΩ Max	5000mA

\*\*\*Operating Temperature: -40°C~+125°C.

(Temperature rise included)

\*\*\*Storage Temperature : -40°C~+125°C.

\*\*\*Storage Humidity:RH10%~70%.

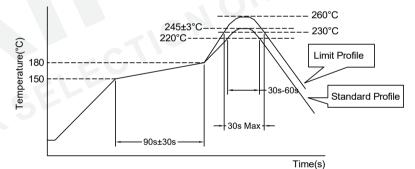
# Material list

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Part Name	SPEC	Material Type	Supplier	UL Number
Core	DR2W10*16	C5A	FengYin Electronics Corporation or Equivalent supplier	N/A
Core	(B=5)			
Copper	2UEW-F	155°C	Elektrisola Hangzhou Co Ltd	E258243
Wire	20EVV-F			
Tube	RSFR-H/600V	125°C	ShenZhen Woer Heat-shrinkable Material Co Ltd	E203950
Tube	K3FK-H/000V			

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# Recommended Soldering Temperature Graph.



	Standard Profile	Standard Profile	
Pre-heating	150~180°C,90s±30s		
Heating	above 220°C,30s-60s	above 240°C,30s Max	
Peak temperature	245°C±3°C	260°C,10s	
Cycle of reflow	2 times	2 times	

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								Document/Rev: 1909291/00
					Tolerances unless otherwise specified: Checked	Checked: Beson. zhan		
								Specification Sheet: 1 of 1
					(.X)±0.50 (.XX)±0.25			
REV	DESCRIPTION	APPD	DATE	FAX:+86-550-7831133	Unit of measurement: mm	Approved: Anson. zhan	Material Number: A331016XS050	Date of Recognition: Jan./02/2020



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4. Some parts of this publication contain statements about the suitability of our products for certain areas of application. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application.

(在此处指明的一些产品包含有关我们的产品在某些应用领域的适用性陈述.这些陈述是基于我们有关应用领域中经常放在的产品上的典型要求了解.然而,我们明确指出,这些声明不能被视为对某些特殊的客 戶运用适合的声明.)

5. Generally, FUAN might not be familiar with either customer's specific application or actual requests as customer does. As a result, customer shall be responsible for checking and confirming whether FUAN product with the performance described in the product specification is suitable for using in customer's particular application or not.

(通常情況下,富安不熟悉特定客戶的应用,也不熟悉客戶本身需求,由于这些原因,客戶始终有责任检查并确定具有产品规格中描述的属性的富安产品是否适合在特定客戶的应用.)

6.We also have to point out that in individual cases, any trouble or failure of electronic components happens during their long span cannot not be completely cleared even if someone operates according to instruction with existing technology.

(在个案中,我们也要指出,在现有技术中,即使按照规定进行操作,电子元件在其通常使用寿命结束之前发生故障也不能完全排除的.)

7.Please pay attention to the storage conditions that temperature: below 35℃ and humidity: 35-65% RH . If product is preserved for more than 1 year, the solderability of their terminals may be deteriorated. (产品在规定的温度和湿度条件下保存:温度: 35℃以下, 湿度: 35-65% RH , 如果保存期超过1年, 端子的可焊性可能会变差.)

8. The aforementioned items do not apply to individual agreements and the foregoing customer-specific products.

(上述内容不适用于个人协议和客户上述提到的特定产品.)

#### General instruction for parts usage:

#### 零件使用一般说明:

1. Please pay more attention to the installation position of the non-magnetic shield type coil when you design the printed circuit board to prevent malfunction caused by magnetic interference. (在设计PCB时,请考虑非磁屏蔽元器件的安装位置,避免磁干扰引起的故障.)





2. Product should not be exposed to environment with high temperature, high humidity, dust, corrosive gas and etc. (请不要将产品保存在高温/高湿/有灰尘,腐蚀性气体等不适合环境中.)

3. The soldering conditions should also be observed. Temperature mentioned refers to the temperature of wave soldering for PIN or terminals but not the temperature of product itself.

(应留意焊锡条件,说明中如有提及到焊锡温度,是指PIN或端子侵入波峰焊的温度,而不是指产品本体.)



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REV	DESCRIPTION	APPD	DATE		Unit of measurement: mm	Approved: Anson. zhan	Material Number:	Date of Recognition:	







Notes for Electrical Characteristics Test 电气特性试验注意事项 Note 1. The general testing condition is Temperature: 25 +/- 5°C (Room temperature) and humidity: 35-65% RH, which is applied to all products except specific product. (注意 1. 除非特别指定,所有产品测试条件为:温度:25±5℃(室温),湿度:35-65%RH.) Note 2. For DIP type products, when the pin length is more than 5mm, the test position should be at 2-5mm away from the bottom of the product: For SMT type products, it is suggested to ensure better contact between the products and the tooling, shown as the right picture: (注意 2.DIP产品脚长超过5mm时,测试位置应选取在产品底部2-5mm处,对SMT产品,产品的测试端子与夹具接触良好,如右图;) 2-5mm 10.0mm 10.0mm 1. Inductance Test(电感测试) There could be measurement deviations with different instruments due to different test principles / internal resistance. Open and Short compensation should be performed before testing. Select the measurement fixture or testing wire that goes with the original instrument. **Optimal Testing position** Wrong testing position (不同仪器会因测试内阻及方法的不同而导致测试偏差,测量前需要进行归零补偿,测量时请选取仪器自带的治具及测试线,) 最佳测试位置 测试位置错误 2. Leakage Inductance Test(漏感测试) Four terminal test for SMT types There could be measurement deviations with different instruments due to different test principles / internal resistance. Open and Short compensation should be performed before testing. SMT型四端试验 Select the measurement fixture or testing wire that goes with the original instrument. DCR milliohm level test (不同仪器会因测试内阻及方法的不同而导致测试偏差,测量前需要进行归零补偿,测量时请选取仪器自带的治具及测试线) (DCR毫欧电平测试) 3. DCR Test(直流电阻测试) Shorten the testing wire as much as possible to ensure better contact between the products and the tooling; there would be deviations for the DCR if the testing tooling contact surface is worn out or if the testing method is not correct, especially for low DCR products. (尽量减短测试线的长度,保证产品与治具良好接触,当测试夹具接触面磨损或测量方法不正确时,会导致DCR值的偏差,特别是当DCR值较小时,) 4. Rated Current, Saturation Current, Temperature Rise Current(额定电流,饱和电流,温升电流) Two sides test for SMT types The saturation current is decided according to the initial inductance drop amount: the rated current is generally taken by the smaller value between SMT型双面试验 the saturation current and temperature rise current. (饱和电流依初始电感下降变化量来选取;额定电流一般选取饱和电流和温升电流两者之间取较小值.) 5. Q Factor / SRF / Z Test(品质因数/SRF/阻抗测试) Shorten the pin length as much as possible to ensure better contact between the products and the tooling ;there can be deviation if the testing tooling contact surface is worn out or if the testing method is not correct. (尽量减短引线的长度,保证产品与治具良好的接触,当测试夹具接触面磨损或测量方法不正确时,会导致测试值的偏差.) 6. Turns Ratio and Phase Test(圈比及相位测试) There would be deviations for turn counts ratio when there is magnetic leakage or air gap in the core center, please pay attention to the differences during testing. If the air gap is too large, then use the planar cores for confirmation; be careful to choose the foot position when testing the polarity. (漏磁及产品耦合不良等原因会导致圈比测试偏差,请在测试中注意区分:当产品的气息过大时,请使用平面磁芯确认,相位测试注意脚位选取.) 7. Hi-Pot Test(高压测试) Choose AC or DC accordingly during Hi-pot testing since they are different. If the humidity is too high or there is pollution on the surface, the Hi-pot test might fail. Please avoid testing in high humidity condition and keep the tooling and products clean. The Hi-pot test is destructive test and repeat testing should be avoided. (AC与DC的耐压不同,请在测试时选择相应的设置,湿度过高及表面受污染则可能会导致耐压不良,请避免在高湿下测试并保持治具及测试产品干净,耐压测试为破坏性测试,请避免重复测试.) 8. IWT Test(层间短路测试) Carefully choose the voltage and standard sample for the testing, IWT test is destructive testing and repeat testing should be avoided. (注意电压和标准样品的选取,测试为破坏性测试,避免重复测试,) Please read cautions and warnings, important notes at the end of this document. If you have any question, please contact FUAN. (请阅读本文件末尾的注意事项和警告、重要注意事项.) (如果您有任何问题,请联系富安.) Customer Name: Make: Qiumei.Liu DRAWING TITLE Tianchang Fuan Electronic Co Ltd Document/Rev:

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