

#### 深圳市超旭电子科技有限公司

SHENZHEN BEYOND&RISING ELECTRONIC TECHNOLOGY CO., LTD

# 承认书

#### SPECIFICATONS FOR APPROVAL

客户代号: (CUSTOMER NO)	CD425
样品单号:	CX1507155
(SAMPLE NO)	
产品名称:	直流风扇
(PART NAME)	
产品规格:	CD4010MB
(SPECIFICATION)	
送样日期:	2015-7-25
(DATE)	
客户料号:	
(CUSTOMER P/N)	

※ 感谢您给予本公司送样承认的机会,烦请将此表签回本公司便于归档。
Thanks for awarding this opportunity of sample approval, please return this form to us for filing after authentication



客户确认(CUST	OMER APPROVE)
盖	章
(SIGN	ATURES)
承认	日期
APPEOVED	DATE

深圳市超旭电子科技有限公司

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- 1. 客户 (Customer): CD425
- 2. 型号 (Model): CD4010MB
- 3. 出货数量 (Samples attached): 3PCS
- 4. 详细说明 (Specifications)

\*

	项目 (ITEM)	技术参数	(SPECIFICATION/CONI	OITION)
	轴承类型 (BEARING TYPE)		(双滚珠) Two Ball	Bearing
	额定电压 (RATING VOLTAGE)		DC 12V	
	工作电压 (RATED VOLTAGE)		DC 10.8V-13.2V	
	启动电压 (START-UP VOLTAGE)		DC 9V (ON/OFF)	
	运转电流 (RATED CURRENT)		$70\text{mA} \pm 10\text{mA}$	
	转速 (RATED SPEED)		$5700$ RPM $\pm 10$ %	
	风量 (AIR FLOW)		5.96CFM	
	风压 (AIR PRESUURE)		3.26mmH2O	
	噪音(NOISE LEVEL)		26.36dB(A)	
	风扇保护类型 (PROFECFION TYPE)			
	阻抗保护 (RESISTANCE PROFECTED)		YES	
	自动启动: (AUTO START)		NO	
	方波输出 (TACHOMETER OUTPUT)		NO	
	锁机高电频输出(LOCK ROTOR ALARM OUTPUT)		NO	
	脉宽调速 (PULSE WIDTH MODULATION)		NO	
	温控转速 (THERMAL SPEED CONTROLLED)		NO	
	线材类别 (CONNECTION LEAD TYPE)		UL1007 26#AWG 框外=	=100mm
	红 (正极)、黑 (负	极)(RED··	··POSITIVE, BLACK···N	EGATIVE)
6	端子类别 (HOUSING)		2510 / 3P 反向	
	标签(LABEL)	(	CD4010MB DC12V C	). 08A
	插针公端	N	NO	

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#### 5. 适用范围 (Scope):

此文件说明 4010B 的热、机械及电气特性 (This documentation defines the thermal、mechanical & electrical characteristics of EC DC FAN 4010B)。

6.产品图形 (Product Drawing):

外观尺寸 (Dimension)

#### 1.0范围 (SCOPE)

此文件说明直流无刷风扇在机械和电气的特性 (This documentation defines mechanical & electrical characteristics of DC Brushless Fans)。

- 2.0 原料 (MATERIAL)
- 2.1 外框(Housing): PBT-VO-Glass 聚脂 P. B. T (PBT-VO-Glass Filled polyester (P. B. T))
- 2.2 扇叶 (Fan Blade) : PBT-VO-Glass 聚脂 P. B.T (PBT-VO-Glass Filled polyester(P. B.T))
- 2.3 轴承类型 (Bearing Sys) : [ ✓ ] 双滚珠 (Two Ball Bearing)
  - ] 单滚珠 (One Ball Bearing)
  - ] 含油 (Sleeve Bearing)
- 3.0 尺寸与结构 (DIMENSIONS & CONSTRUCCTION)

所有尺寸、旋转方向和气流按照所附图纸上说明(All dimensions, direction of rotation and air flow were specified as per drawing attached.)

- 4.0 特性和说明(CHARACTERISTICE & DEFINITION)
- 4.1 所有比率特性均按随附数据单上说明(All rated characteristics were specified as per data sheet enclosed)。
- 4.2 电流: 电流在持续旋转 3 分钟后测量 (Rated Current: Rated Current shall be measured after 3 minutes of continuous rotation at rated voltage。)
- 4.3 转速: 速率在持续旋转 3 分钟后测量 (Rated Speed: Rated Speed shall be measured after 3 minutes of continuous rotation at rated voltage)。
- 4.4 起动电压: 打开开关 "ON"后,能够起动风扇运作的电压 (Start Voltage: The voltage which is able to start the fan to operate by suddenly switching "ON")。
- 4.5 输入功率: 输入功率在持续旋转 3 分钟后测量 (Input Power: Input Power shall be measured after 3 minutes of continuous rotation at rated voltage。)
- 4.6 锁定电流: 可以锁机的风扇, 锁定电流在清新空气中锁机 3 分钟测定 (The fan can be locked, Locked Rotor Current: Locked Current shall be measured within one minute of rotor Locked after 3 minutes of continuous at rated voltage in clean air).
- 4.7 空气流量数据及压力数据测定根据"AMCA标准"或者 DIN24163 规则,该数据测定在双压力仓进行,并需测定压力仓各边所承受的压力数据(Air Flow & Static Pressure: The air flow data and static pressures should be determined in accordance with AMCA standard or DIN24163 specification in a double chamber testing with intake side measurement)。
- 4.8 噪音标准: 噪音标准测试参照 DIN45635 标准,测量在隔音室内进行,将麦克风置于风扇一米处 (Noise Level: The measurement of noise level is carried out with reference to DIN45635 in an anechoic chamber with the microphone positioned 1 meter from the air intake. Testing fan shall be hung in clean air。)
- 5.0 机械力检测 (MECHANICAL INSPECTION)
- 5.1 旋转方向 (Rotation Direction)

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从扇叶面看风扇,扇叶逆时针方向旋转,按外框一边的箭号指示相同方向(The blade is count Clockwise viewing from the blade. The same direction also indicated by an arrow mark on one side of the housing。)

5.2 保护试验 (Protection)

几个风扇扇叶连在一起固定限制其旋转,如果风扇及电子组件不会损坏,限制旋转的组件被解松则风扇可自动重新启动旋转。(All fans have integrated protection against locked rotor condition so that there will be no damage to winding or any electronic component. Restarting is automatic as soon as any constraint component to rotation has been released。)

风扇放置在垂直位置,打开开关"ON"或"OFF"风扇旋转或停止,运转正常则说明风扇是合格品 (As fan placed at dead angle position, and the switch of FAN was changed from off to on, Restarting was automatic normal as soon as and proved that this fan is good fan)

- 5.3 转体锁定保护 (Locked Rotor Protection)
- 5.3.1小电流或者带 Auto start 功能的风扇,在通电旋转状态将风扇扇叶锁定,持续72小时之后,松开被锁定扇叶并断开电源,再重新启动电源,风扇自动重转,证明风扇无异常。(No damage shall be found after 72 hours continuously at condition of rotation locked, Restarting is automatic as soon as constraint to running has been released)。
- 5.3.2大电流或不带 Auto start 功能的风扇,不可长时间锁定,否则风扇会过热损坏。(The fan can't be locked or the fan will overheat and be damaged)
- 5.4 自由跌落 (Free Drop shock)

单体由 600mm 高空跌到 30mm 厚的木板上, 风扇 6 个表面中的任何一面和一角均经得起跌落试验, 并确认无损伤. (The product drops from the height of 600mm to the wood board of 30mm. Any one of the 6 faces and any one of the corners could withstand the pressure, and also no damage will be found.)。电力测定(ELECTRICAL INSPECTION)

5.5 绝缘电阻 (Insulation Resistance)

在 500V 直流电条件下,外框与导线正极电阻不少于 10MΩ(Not less than 10M ohm between housing and positive end of lead wire(red) at 500V DC)。

6.0 绝缘强度 (Dielectric Strength)

在 5mA 漏电流,500VAC 条件下持续 60 秒,风扇外框与导线无异常,证明绝缘良好(No damage should at 500 VAC for 60 sec, measured with 5mA trip current between housing and positive end of lead wire)。

6.1 平均寿命 (Life Expectancy)

在指定恒温下持续工作后, 经检验, 90%能正常运转即可估算其平均使用寿命 (The continuous duty life at given temperature after which, 90% of testing units shall still be running)。

Bearing System	Test Temperature	Test time
Ball Bearing	25℃	50000
Ball Bearing	40°C	42000
Ball Bearing	60℃	30000

- 7.0 工作环境 (ENVIRONMENTAL)
- 7.1 运行温度 (Operating Temperature) -10℃ ~70℃为正常温度 (-10℃ to +70℃ at normal humidity)。
- 7.2 贮存温度 (Storage Temperature) 在-40℃ ~70℃温度下贮存 500 小时后,经过在室内温度下 24 小时恢复期后,所有功能

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正常运作 (All function shall be normal after 500 hours storage at -40°C to +70°C at normal humidity with a 24 hour recovery period at room temperature)。

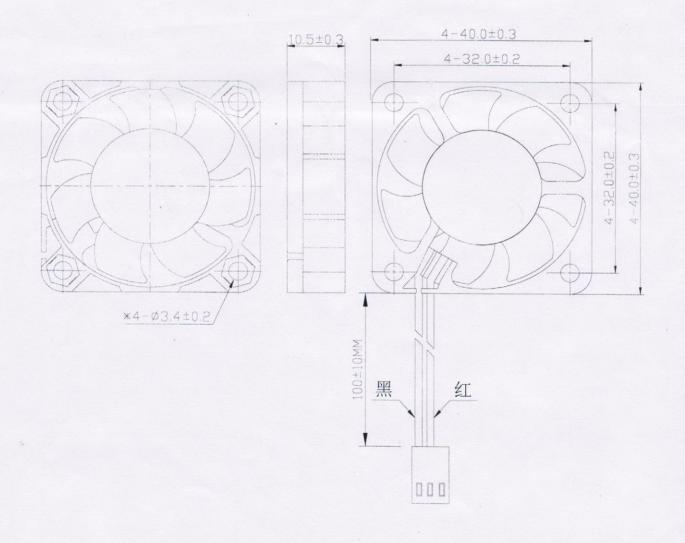
7.3 湿度 (Humidity)

95%RH. 40+/-2°Cper MiL-STD-202F 标准 103B 湿度检测 96 小时, 绝缘电阻和绝缘强度测量数据符合 8.0 说明。(After 96 hours 95%RH 40+/-2°Cper MiL-STD-202F, method 103B humidity test, the measured data on insulation resistance and dielectric strength shall meet the specification. 8.0 REMARKS)

- 8.0 说明 (REMARKS)
- 8.1 材料和结构的改变将另附说明 (Material and construction are subject to change without advance. The changes should be within specification)
- 8.2 风扇的检验标准为 GB/T2828.1-2003 II 标准。(All fans shall meet the quality inspection under sampling plan GB/T2828.1-2003 II as follow)

致命的	Critical	0
严重	Major	0.65
轻微	Minor0	1

- 9.0 产品图形(Product Drawing)
- 10.0单位: 毫米 (Unit:mm)





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### 风扇使用注意事项



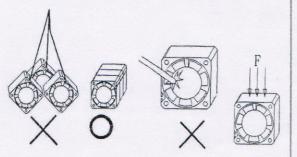
### HOW TO HANDLE FAN PRORERLY?

11.1、使用时请勿超出本规格所规定的范围,否则我们不保证此产品. We will not guarantee the products if the application of our products are exceeded the limitation which is specified on this specification.





11.2、请勿触压着叶片以及电源线缠绕着风扇或用力 拉扯电源线,如此轴心与电源线将会被损毁. Please do not touch the impeller with the pressure and never bring the fan with lead wire. The bearing and lead wire may be damaged.



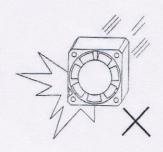
- 11.3、本产品不保证因粉尘、水滴、小虫进入,而影响寿命与不良品产生. No guarantee on the products against the safety problem or failure caused by powder dust, drop of water or insect.
- 11.4、当风扇于运转中,请勿企图将风扇锁死特别长的时间,如此,会因连续停止不转,产生 高热而烧毁风扇.

While the fan is in operation, please do not lock the fan intentionally for a long periods of time, since the continuous stoppage will result in overheat and thus burnt out the fan.

11.5、组装风扇时,请特别注意,因共振或振动产生的噪音. During the installation of the fan, please pay substantial attention to possible notice caused by resonance vibration and shock.

11.6、当搬运或作业中,风扇如从60cm的高度落下,将会对叶片的平 衡产生影响,特别是滚珠轴承避免掉落.

It is very important to notify that avoid to drop from 60cm height when in any movement or operation, it will impact the balance of blade. Especially ball bearing structure is avoided to drop down.



11.7、锁外壳之螺丝扭力不得超 4Kgf.

The torque of the screw which locked the frame should not exceed 4Kgf.