

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



### Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









## **SPECIFICATION FOR APPROVAL**

Gustomer			
Description	DC FAN		
Part No.		R E V .	
Delta Model No	PFB0848UHE	REV	01
Sample Issue No	). <u> </u>		
Sample Issue Da	te_ AUG.25.2009	9	
·			
BACK AFTER	ONE COPY OF THE YOU SIGNED PRE-ARRANGMEN	APPROVAL	
APPROVED BY	: <u> </u>		
DATE	:		

DELTA ELECTRONICS, INC.
TAOYUAN PLANT
252, SHANG YING ROAD, KUEI SAN INDUSTRIAL ZONE
TAOYUAN SHIEN, TAIWAN, R.O.C.
TEL:886-(0)3-3591968

FAX:886-(0)3-3591991

DELTA ELECTRONICS, INC. 252, SHANG YING ROAD, KUEI SAN TAOYUAN HSIEN 333, TAIWAN, R. O. C.

# 

TEL: 886-(0)3-3591968 FAX: 886-(0)3-3591991

Customer:		
Description:	DC FAN	
Customer P/N:		REV:
Delta Model NO.:	PFB0848UHE	
Sample Rev:	01	Issue N0:
Sample Issue Date:	AUG.25.2009	Quantity:

#### 1. SCOPE:

THIS SPECIFICATION DEFINES THE ELECTRICAL AND MECHANICAL CHARACTERISTICS OF THE DC BRUSHLESS AXIAL FLOW FAN. THE FAN MOTOR IS WITH SINGLE PHASE AND FOUR POLES.

#### 2. CHARACTERS:

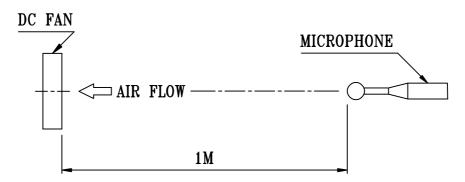
ITEM	DESCRIPTION				
RATED VOLTAGE	48 VDC				
OPERATION VOLTAGE	28.0 - 56.0 VDC				
INPUT CURRENT	0.42 (0.65MAX.) A				
INPUT POWER	20.16 (31.20 MAX.) W				
SPEED	7500R.P.M. (REF.)				
MAX. AIR FLOW (AT ZERO STATIC PRESSURE)	3.038 ( MIN. 2.734) M <sup>3</sup> /MIN 107.3 ( MIN. 96.57) CFM				
MAX.AIR PRESSURE (AT ZERO AIR FLOW)	34.75 ( MIN. 28.14 )mmH <sub>2</sub> 0 1.368 ( MIN. 1.108)inchH <sub>2</sub> 0				
ACOUSTICAL NOISE (AVG.)	61.0 (MAX 65.0) dB-A				
INSULATION TYPE	UL: CLASS A				

(continued)

PART NO: DELTA MODEL: PFB0848UHE

10 MEG OHM MIN. AT 500 VDC (BETWEEN FRAME AND (+) TERMINAL)
5 mA MAX. AT 500 VAC 50/60 Hz   ONE MINUTE, (BETWEEN FRAME AND   (+) TERMINAL)
OPEN TYPE
50,000 HOURS CONTINOUS OPERATION AT 40 °C WITH 15 ~ 65 %RH.
CLOCKWISE VIEW FROM NAME PLATE SIDE
THE CURRENT WILL SHUT DOWN, WHEN LOCKING ROTOR.
UL 1007 -F- AWG #24 BLACK WIRE NEGATIVE(-) RED WIRE POSITIVE(+)

- NOTES: 1. ALL READINGS ARE MEASURED AFTER STABLY WARMING UP THROUGH 10 MINUTES
  - 2. THE VALUES WRITTEN IN PARENS, ( ), ARE LIMITED SPEC.
  - 3. ACOUSTICAL NOISE MEASURING CONDITION:



NOISE IS MEASURED AT RATED VOLTAGE IN FREE AIR IN ANECHOIC CHAMBER WITH B & K SOUND LEVEL METER WITH MICROPHONE AT A DISTANCE OF ONE METER FROM THE FAN INTAKE.

A00

PART NO:						
DELTA MO	DEL: PFB0848UHE					
3. MECHA	NICAL:					
3-1. D	IMENSIONS	SEE DIMENSIONS DRAWING				
3-2. F	RAME	PLASTIC UL: 94V-0				
3-3. IN	MPELLER	PLASTIC UL: 94V-0				
3-4. B	EARING SYSTEM	TWO BALL BEARINGS				
3-5. W	EIGHT	201 GRAMS				
4. ENVIRO	ONMENTAL:					
4-1. 0	PERATING TEMPERATURE	10 TO +60 DEGREE C				
4-2. S	TORAGE TEMPERATURE ——————	− −40 ТО +70 DEGREE С				
4-3. 0	PERATING HUMIDITY —————	———— 5 TO 90 % RH				
4-4. S	TORAGE HUMIDITY	———— 5 TO 95 % RH				
5. PROTE	CCTION:					

#### 5-1. LOCKED ROTOR PROTECTION

IMPEDANCE OF MOTOR WINDING PROTECTS MOTOR FROM FIRE IN 96 HOURS OF LOCKED ROTOR CONDITION AT THE RATED VOLTAGE.

#### 5-2. POLARITY PROTECTION

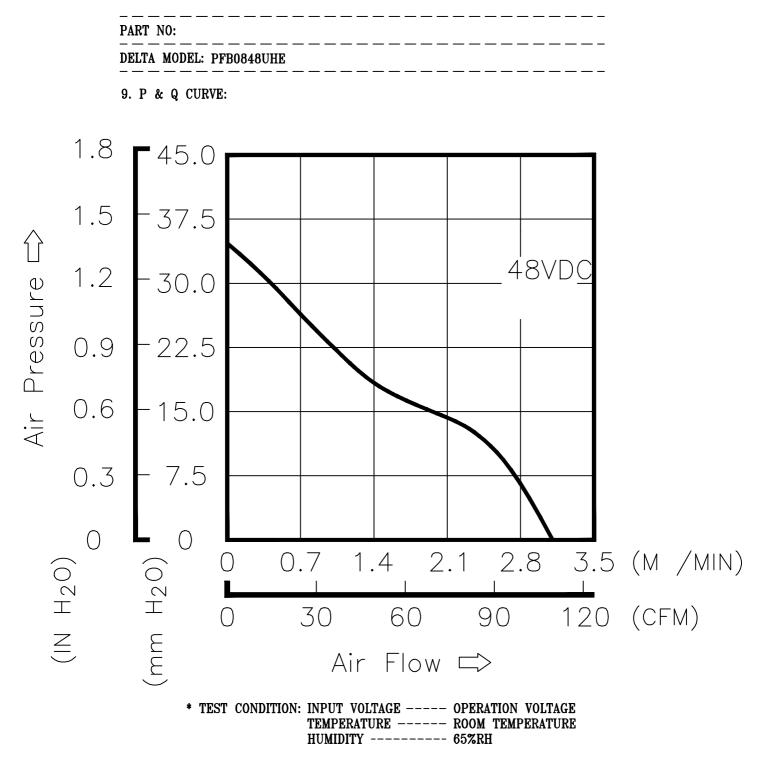
BE CAPABLE OF WITHSTANDING IF REVERSE CONNECTION FOR POSITIVE AND NEGATIVE LEADS.

### 6. RE OZONE DEPLETING SUBSTANCES:

6-1. NO CONTAINING PBBs, PBBos, CFCs, PBBEs, PBDPEs AND HCFCs.

#### 7. PRODUCTION LOCATION

7-1. PRODUCTS WILL BE PRODUCED IN CHINA OR THAILAND OR TAIWAN.

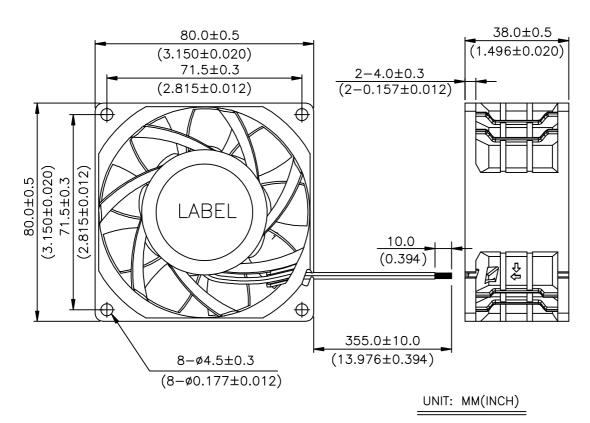


PART NO:		 	 	 	 	
DELTA MODEL:	PFB0848UHE					

#### 10. DIMENSIONS DRAWING

LABEL:





UL 1007 -F- AWG #24 BLACK WIRE NEGATIVE(-) RED WIRE POSITIVE(+)

Page: 5



## **Application Notice**

- 1. Delta will not guarantee the performance of the products if the application condition falls outside the parameters set forth in the specification.
- 2. A written request should be submitted to Delta prior to approval if deviation from this specification is required.
- 3. Please exercise caution when handling fans. Damage may be caused when pressure is applied to the impeller, if the fans are handled by the lead wires, or if the fan was hard-dropped to the production floor.
- 4. Except as pertains to some special designs, there is no guarantee that the products will be free from any such safety problems or failures as caused by the introduction of powder, droplets of water or encroachment of insect into the hub.
- 5. The above-mentioned conditions are representative of some unique examples and viewed as the first point of reference prior to all other information.
- 6. It is very important to establish the correct polarity before connecting the fan to the power source. Positive (+) and Negative (-). Damage may be caused to the fans if connection is with reverse polarity, if there is no foolproof method to protect against such error specifically mentioned in this spec.
- 7. Delta fans without special protection are not suitable where any corrosive fluids are introduced to their environment.
- 8. Please ensure all fans are stored according to the storage temperature limits specified. Do not store fans in a high humidity environment. We highly recommend performance testing is conducted before shipping, if the fans have been stored over 6 months.
- 9. Not all fans are provided with the Lock Rotor Protection feature. If you impair the rotation of the impeller for the fans that do not have this function, the performance of those fans will lead to failure.
- 10. Please be cautious when mounting the fan. Incorrect mounting of fans may cause excess resonance, vibration and subsequent noise.
- 11. It is important to consider safety when testing the fans. A suitable fan guard should be fitted to the fan to guard against any potential for personal injury.
- 12. Except where specifically stated, all tests are carried out at room (ambient) temperature and relative humidity conditions of 25°C, 65% RH. The test value is only for fan performance itself.
- 13. Be certain to connect an " $4.7\mu F$  or greater" capacitor to the fan externally when the application calls for using multiple fans in parallel, to avoid any unstable power.

Doc. No: FMBG-ES Form 001 Rev. 0001 Date: June 24, 2009