

SPECIFICATION FOR APPROVAL

CUSTOMER :

DESCRIPTION : DC BRUSHLESS FAN

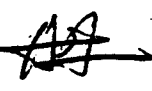
DIMENSIONS : 40X40X10 mm

M O D E L : KDE0504PFB3-8

APPROVED NO :

APPROVED BY :
(AUTHORZIED)



DAWN.	--- 3/4	CHKD.		APPD.		SPEC. NO.	042458300
						ISSUE DATE	01.04.1996
						EDITION	0
						REVISE DATE	

EME Fan & Motor (949) 583-9785 [Fax]
25501 Arctic Ocean Drive (949) 583-9802
Lake Forest, CA. 92630

DC BRUSHLESS FAN

MODEL: KDE0504PFB3-8

CHARACTERISTICS

1. Input power , Current & Speed : Measured after continuous 30 minutes operation at rated voltage in clean air at ambient temperature of 25 degrees C.
2. Noise Level : Measured in an semi-anechoic chamber with background noise level below 15 dBA. The fan is running in free air with microphone at a distance of one meter from the fan intake.
3. Dielectric Strength : Applied AC 500V for one minute or AC 600V for 2 seconds between housing and lead wire(+)
4. Motor Design : Patented single-coil DC brushless 8 poles motor design.
5. Insulation Resistance : More than 500M ohm between internal stator and lead wire(+) measured by DC 500V.
6. Tolerances : +-15% on rated power and current
7. Motor Protection : Polarity protected & Locked rotor protected.
8. Air Performance : Measured by a double chamber. The value are recorded when the fan speed is stabilized at rated voltage.



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SPECIFICATIONS

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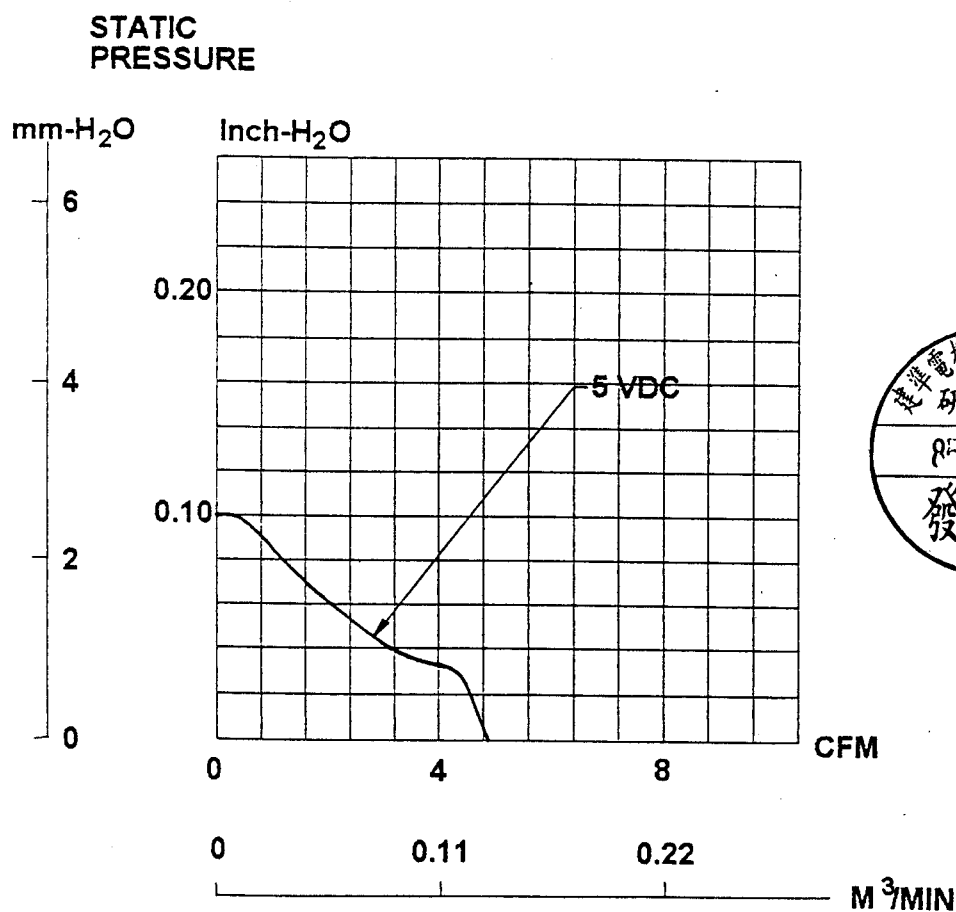
- 1-1. Rated Voltage : 5 VDC
- 1-2. Operating Voltage Range : 4-6 VDC
- 1-3. Starting Voltage : 4 VDC
- 1-4. Rated Speed : 5300 RPM $\pm$ 1000 RPM
- 1-5. Air Delivery : 4.8 CFM
- 1-6. Static Pressure : 0.10 Inch-H₂O
- 1-7. Rated Current : 0.08 AMP
- 1-8. Rated Power : 0.4 WATTS
- 1-9. Noise Level : 23.5 dB(A)
- 1-10. Direction of Rotation : Clockwies viewed from front face
- 1-11. Operating Temperature : -20 to +80 Deg.C
- 1-12. Storage Temperature : -40 to +80 Deg.C
- 1-13. Bearing System : Precise ball bearing system
- 1-14. Weight : 20g
- 1-15. Safety : UL/CUR Approvals



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PERFORMANCE CURVES



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E D I T I O N

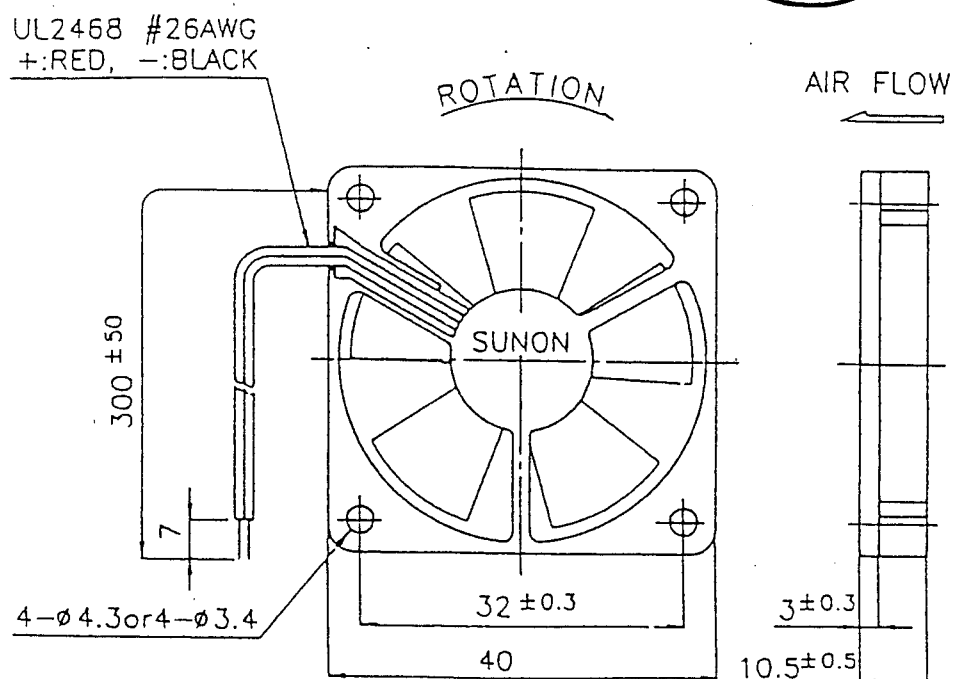
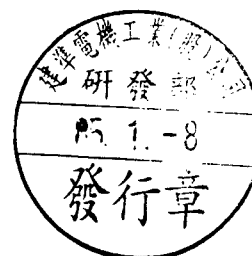
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P A G E

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MATERIAL

- 2-1. Frame : Thermoplastic PBT of UL 94V-0
 2-2. Impeller : Thermoplastic PBT of UL 94V-0
 2-3. Bobbin : Thermoplastic PBT of UL 94V-0
 2-4. Lead Wire : UL2468, 26AWG, +:RED ; -:BLACK

DIMENSIONS

UNIT : mm

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SUNONWEALTH ELECTRIC MACHINE IND. CO., LTD.

LIFE TEST REPORT

QCF-090701

MODEL NO.	KDE0504PFB3-E	TEST CONDITION	A. INPUT	5 VDC	TEST PERIOD	START	06/23/95
ELEC-SPEC.	RPM. 5300. mA 0.08		B. TEMP.	65 °C		FINISH	09/29/95
TEST SAMPLES	50 PCS				FAILURES		2
TEST HRS/EA	2352 Hrs				CONF. LEVEL		90 %
TOTAL TEST HRS	117600 Hrs				APPLICATION, MTBF		22096 Hrs

FAILURE DEFINITION	TEST RESULT, (INCLUDING TIME TO FAILURE, DATA, STATISTICS....ETC.)					
	CUM. F	TIME(HRS)	Q'TY AT R(%)	CUM. F(%)	INTERPRETATION ON FAILURES	
1. PAN HOT WORK	1	2352	49	2.00 %	DEAD POINT	
2. RPM. OVER 20 % OF ORIGIN	2	2352	48	4.00 %	NOISE	
3. MA OVER 20 % OF ORIGIN						
4. VIBRATION						
5. ABNORMAL SOUND						
CHECK POINT AT THE HOURS OF						
168, 336, 504,.....,2352						
TOTAL TEST HRS=2352* 1 + 2352* 1 + 2352* 1 + 2352* 1 = 117600						
BY CUI-SQUARE TABLE : GET MTBF = 22096						

MTBF FOR OTHER TEMPERATURE	25 °C	30 °C	35 °C	40 °C	45 °C	50 °C	55 °C	60 °C	65 °C	70 °C	75 °C	80 °C
BY A.F COUNTING	83204	69159	57832	48336	41126	34957	29881	25629	22096	19133	16636	14522

APPROVED by:	CHECKED by:	INSPECTED by:
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