

# SPECIFICATIONS

**MODEL: YX2505**

**SIZE: 60 x 60 x 25 mm**

## **A) SCOPE:**

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

## **B) ELECTRICAL CHARACTERISTICS**

ALL MEASUREMENTS PERFORMED

AT 20-30 DEGREE C ROOM TEMPERATURE & 50-70% R.H.

UNLESS OTHERWISE SPECIFIED

	<b>ITEM</b>	<b>DESCRIPTION</b>	<b>REMARK</b>
1	RATE VOLTAGE	12 V DC	
2	RATE CURRENT	0.13A +/- 10%	IN FREE AIR
3	INPUT POWER	1.56W +/- 10%	IN FREE AIR
4	SPEED	4000 RPM +/- 10%	IN FREE AIR
5	MAX AIR FLOW	20.0 CFM +/- 10%	AT ZERO STATIC PRESSURE
6	MAX STATIC PRESSURE	0.17 INCH-H <sub>2</sub> O +/- 10%	AT ZERO AIR FLOW
7	INSULATION RESISTANCE	10Meg Ohm Min. at 500V DC	BETWEEN FRAME AND TERMINAL
8	DIELECTRIC STRENGTH 10MA MAX AT 700V AC 60 HZ FOR 1 MINUTE		BETWEEN FRAME AND TERMINAL
10	LIFE EXPECTANCE	40000 HOURS	IN 25 C 65% RH.
11	ACOUSTICAL NOISE	30 dBA MAX MEASURING DISTANCE 1M	
12	VIBRATION TEST	AMPLITUDE 1.5M 10-55HZ 3 DIRECTION X.Y.Z. 1HR	
13	SHOCK TEST	ACCELERATION OF GRAVITY 30G. AT 6M X.Y.Z. 1HR	
14	BEARING TYPE	FLUID MAGNETIC BEARING	
15	AIR-FLOW DIRECTION	AIR INTAKE OVER THE STRUTS	
16	INSULATION RANK	UL: CLASS A	

\* LIFE IS DEFINED AS THE TIME MOTOR SPEED DECREASED MORE THAN 30% COMPARED WITH INITIAL VALUE

### C) MECHANICAL

- C-1) DIMENSIONS-----SEE ATTACHED
- C-2) FRAME-----DIE CAST ALUMINUM PAINTED BLACK
- C-3) FAN BLADE-----PLASTIC PBT UL: 94V-0 RATING +FIBER GLASS
- C-4) BEARING SYSETM-----SLEEVE BEARING
- C-5) LEAD WIRE-----UL 1007 AWG #24
  - + POSTIVE -----RED
  - NEGATIVE-----BLUE

### D) PROTECTION:

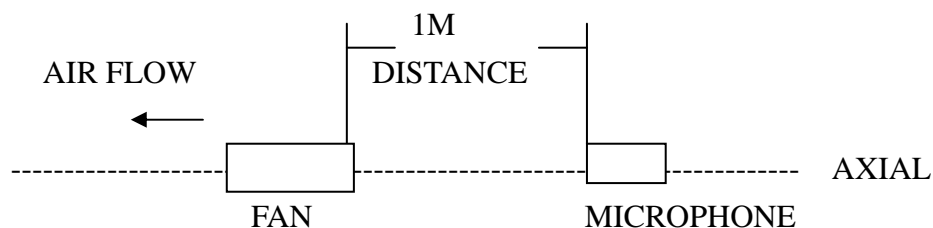
- D-1) POLARITY PROTECTION
  - BUILT-IN ELECTRONIC CIRCUIT PROTECTS THE FAN AGAINST REVERSE CONNECTION OF POSITIVE AND REVERSE LEADS

### E) ENVIERONMENTAL:

- E-1) OPERATING TEMPERATURE ----- -10 TO + 70 DEGREE C
- E-2) STORAGE TEMPERATURE----- -40 TO + 75 DEGREE C
- E-3) DROP TEST
  - IN MINIMUM PACKAGING CONDITION FANS WITHSTANDS EACH ONE DROP OF THREE FACES FROM 30 CM DISTANCE HEIGHT ONTO 10MM THICKNESS OF WOODEN BOARD
- E-4) VIBRATION TEST
  - FREQUENCY: 10-50 HZ AMPLTUDE X. Y. Z. DIRECTION EACH FOR 1 HR
- E-5) SHOCK TEST
  - APPLY PEAK ACCELERATION 50g AND KEEP DURATION OF THE PULSE FOR 11ms ( HALF SINE WAVE)

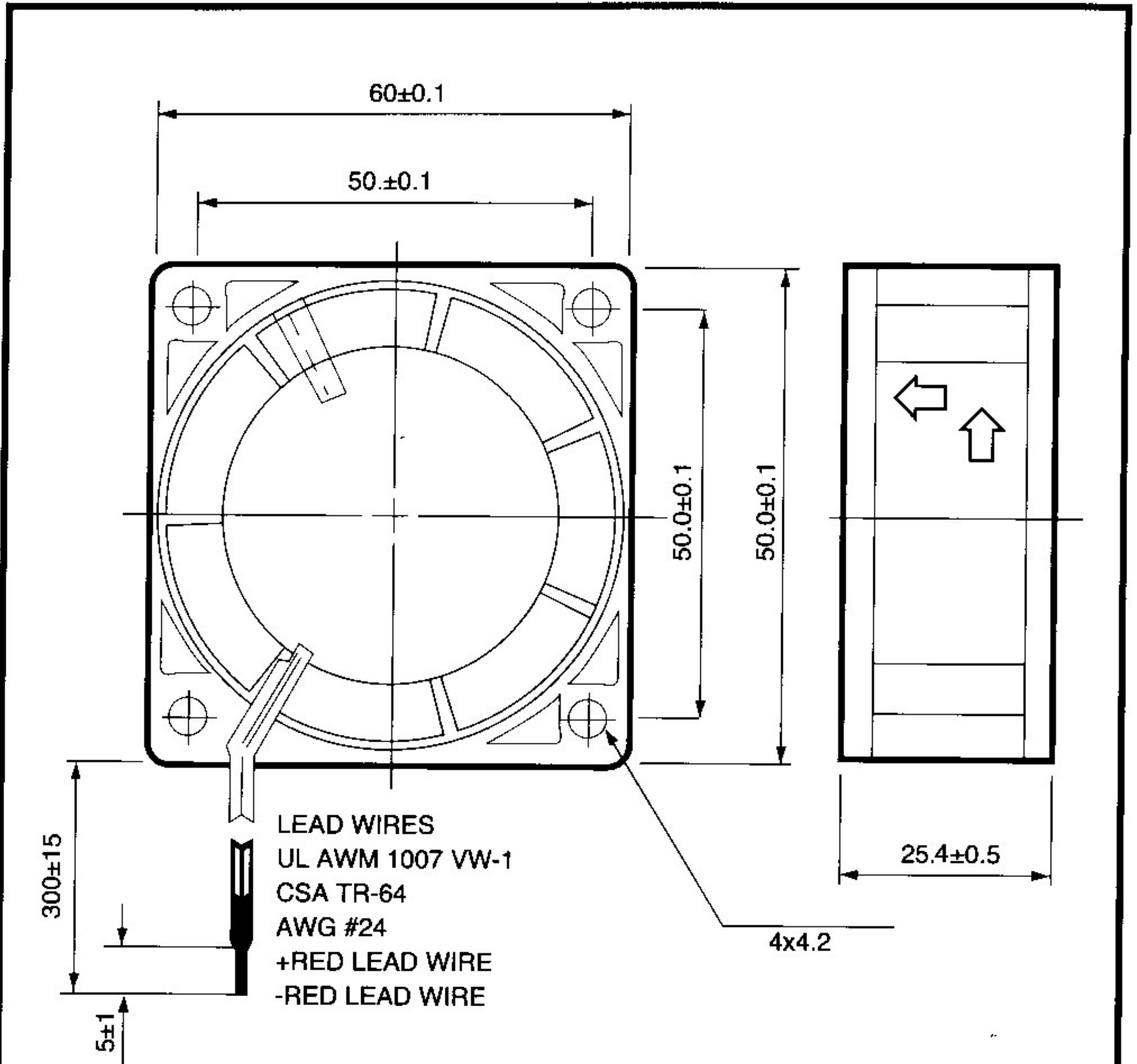
### F) ACOUSTICAL NOISE:

- F-1) MEASUREMENT STE-UP



- F-2) MEASUREMENT PERFORMED IN ANECHOIC EST CHAMBER UNDER FREE AIR CONDITON
  - F-3) CHAMBER BACK GROUND NOISE 17 dB MAX.
  - F-4) READING TAKEN FROM SPECTRUN ANALYZER
- ### G) STATICS PRESSURE VS AIR FLOW CURVE:
- AS ATTACHED PAGE:

# DIMENSIONS:MM



# PERFORMANCE

