Mode Electronics Part No: **59-114-0**

SPECIFICATION

THIS SPECIFICATION DEFINS THE ELECTRICAL AND MECHANICAL CHARACTERISTICS OF THE BRUSHLESS FAN.

1.Mechanical Specification:

NO.	Items	Description
1-1.	Dimension	120X120X38 mm
1-2.	Housing Material	Plastic UL 94V-0 (P.B.T)
1-3.	Impeller Material	Plastic UL 94V-0 (P.B.T)
1-4.	Motor number of poles	4-Pole
1-5.	Weight	About 50g

2.General Specification:

NO.	Items	Description
2-1.	Dimension	See Dimensions Drawing
2-2.	Bearing System	Ball Bearing
2-3.	Rated Voltage	12 VDC
2-4.	Operating Voltage	7.0 - 15.0 VDC
2-5.	Start Voltage	5.0 VDC
2-6.	Rated Current	0.55 A
2-7.	Rated Power	6.60 W
2-8.	Rated Speed	2800 ± 10% R.P.M
2-9.	Max.Airflow At Zero Static Pressure	140.80 CFM 3.99 M^3/MIN

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NO.	Items	Description
2-10.	Max.Static Pressure At Zero Airflow	6.60 mm-H_20 0.259 inch-H_20
2-11.	Speed Control Type	No
2-11.	Auto Restart	Yes
2-13.	Alarm Signal Output	No
2-14.	(FG)Signal Output	No
2-15.	Life Expectancy	50,000 Hours At 40^{O}C With 15-65%RH
2-16.	Noise Level	43.0 dB-A

3.Protetion Specification:

NO.	Items	Description
3-1.	Polarity Protection	Circuit Is Protected When VCC& Are Exchange The Circuit Won`t Be Burned With 10 Seconds.
3-2.	Insulation Resistance	10M Ohm At 500VDC Between Frame And Terminal.
3-3.	Dielectric Strength	5 mA Maximum. / Measured Between Lead Wire (+) And Frame At 500 VAC/Min.
3-4.	Special Function	☐Soft Start ☐Current Limiter ☐Constant Speed
3-5.	Locked Motor Pretection	a. Auto Power Off After Locked At Rated Voltage For 1 Second. b. After Auto Power Off, Ciircuuit Afftempt To Restart In 2-6 Seconds.
3-6.	Insulation Class	UL: Class A

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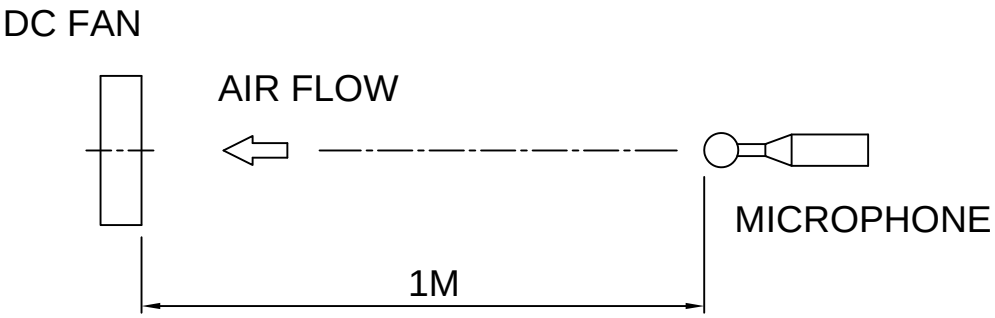
NOTE:

A.The Values Waitten In Parenthesis,(),Are Limited SPEC.

B.Accoustical Noise Measuring Condition:



Noise is Measured At Rated Voltage In Free Air in Accoustical Chamber With Larson Davis Type 824S Sound LEVEL Meter.

C.The Air Flow And Air Pressure Measured At Rated Voltage In Double Chamber Is Measured Accourding To Amca Standerd 210-85.

NO.	Items	Description
3-7.	Operation Temperature	Temperature: At -10°C+70°C
3-8.	Operation Humidity	Humidity: 20%-85% RH
3-9.	Storage Temperature	Temperature: At -40°C+70°C
3-10.	Storage Humidity	Humidity: 20%-85% RH
3-11.	Test Of High &Low Temperature	Test Circulation At -10°C+70°C Two Times Per 4 Hours
3-12.	Packing Vibration Test	Packing Condition: X, Y, Z 3 Direction 1.1G Load Vibration Test
3-13.	Packing Shock Proof Test	1 Corner, 3 Edges, 6 Faces Natural Drop From 60CM, High, Packed

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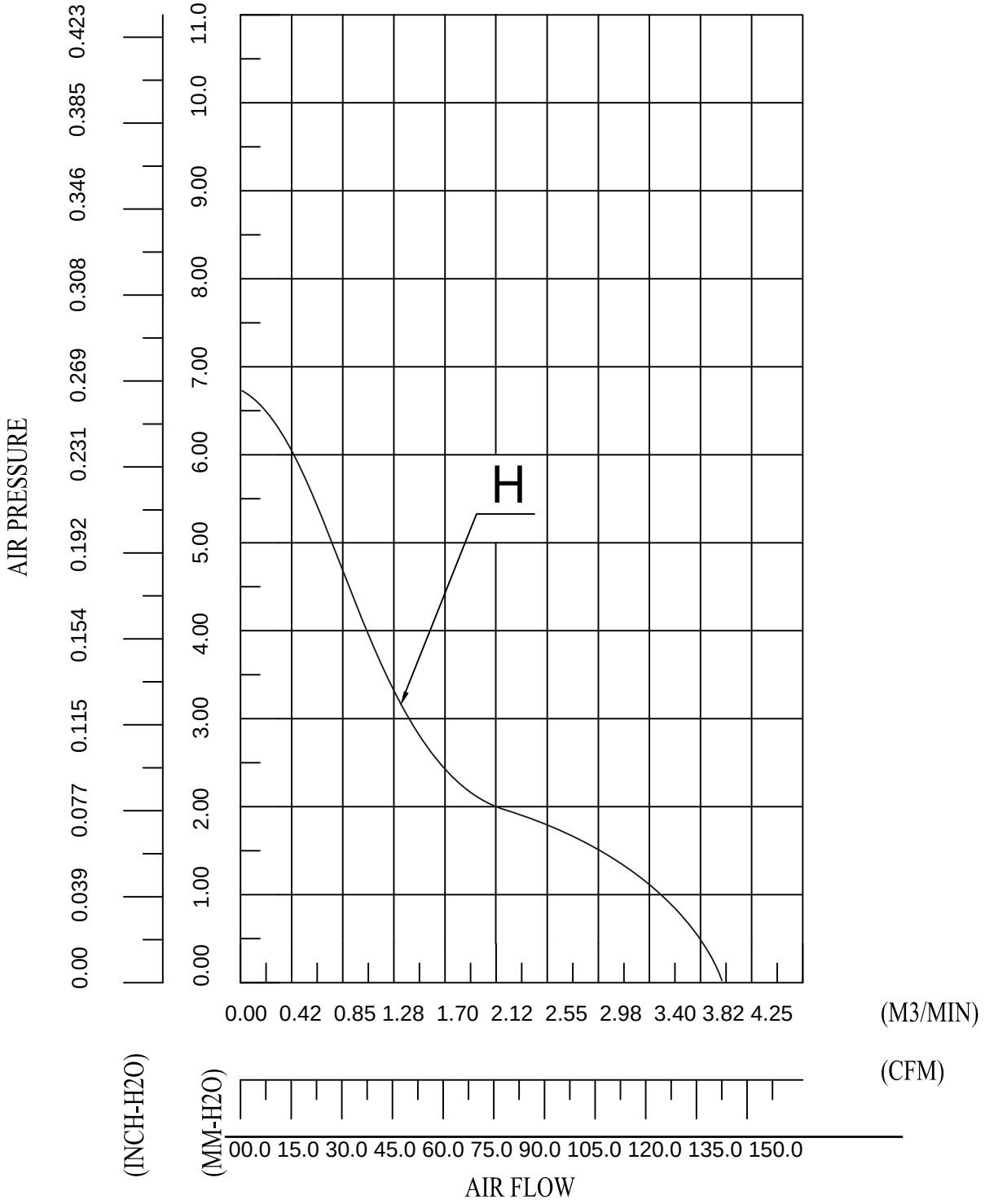
4.P & Q Curve:



* TEST CONDITION:

INPUT VOLTAGE	——	OPERATION VOLTAGE
TEMPERATURE	——	ROOM TEMPERATURE
HUMIDITY	——	65%RH

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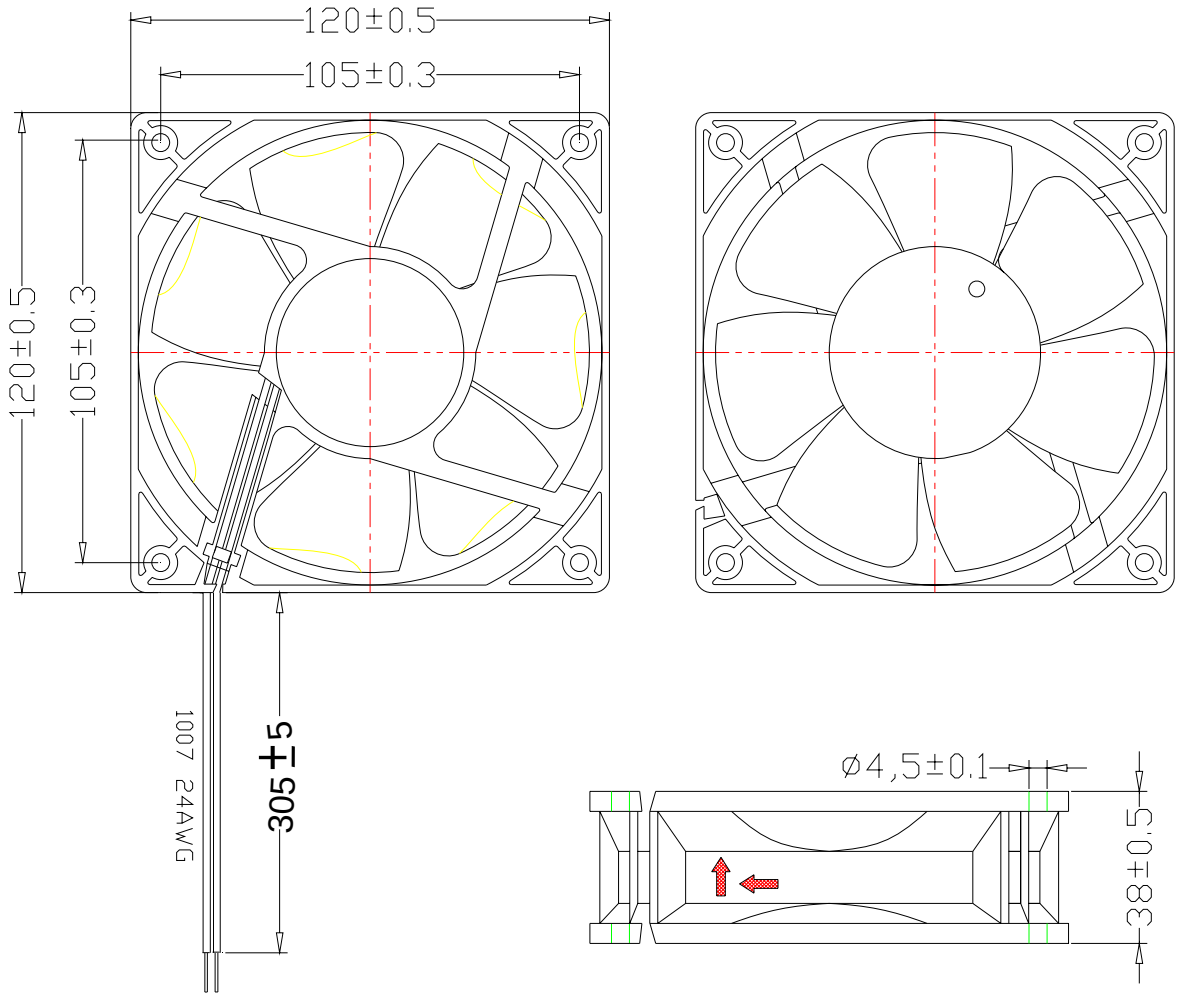
5. Dimension Drawing:



NOTES:

1. LEAD WIRE UL1007 24#
2. RED WIRE---- (+)

   BLACK WIRE---- (-)
3. Frame out: 305±5mm

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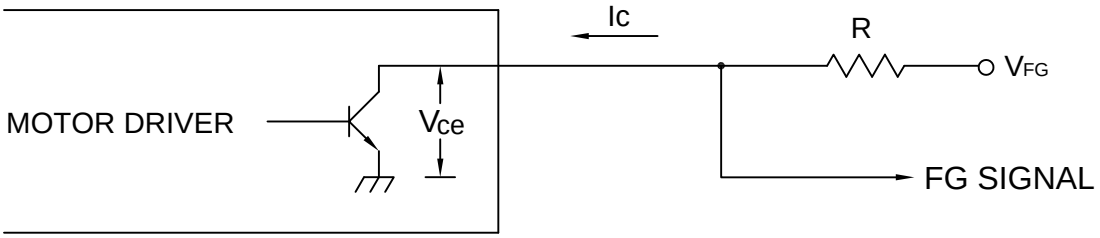
6. Frequency Generatio(FG) Signal:

6-1. SCHEMATIC:



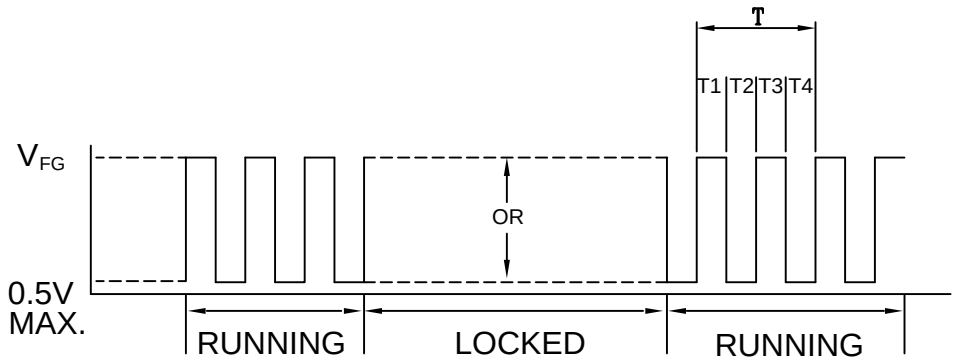
CAUTION:

The Lead Wire Of FG Signal Can Not Touch
The Lead Wire Of Positive Or Negative.

6-2. SIGNAL SPECIFICATION:

Output Type: Open Collector
VFG Maximum Voltage=15V
IC Maximum Current=5MA
Low Level Voltage=0.5V MAX.
R >_VFG/IC

6-3. FREQUENCY GENERATOR WAVEFORM:



T=T1+T2+T3+T4=60/N (SEC) N: SPEED(RPM)