

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!



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## San Ace 172

### General Specifications

· Material · · · · · Frame: Aluminum,

Impeller: Plastics (Flammability: UL94V-1)

• Expected Life ...... Refer to specifications (L10:Survival rate: 90% at 60°C,

rated voltage, and continuously run in a free air state)

· Dielectric Strength ······· 50/60Hz 1,500VAC 1minute (between input terminal and frame)

· Dielectric Strength (With Sensor) ··· Between AC input and DC input(Sensor output)

: 50/60Hz 1,000VAC 1minute Between AC input and G

: 50/60Hz 1,500VAC 1minute,

Between G and DC input(Sensor output)

:50/60Hz 1,000VAC 1minute

· Sensor-Purpose Lead Wire  $\cdots \oplus$  brown  $\ominus$  black  $\bigcirc$  Sensor yellow · Storage Temperature ····· −30°C to +70°C (Non-condensing)

· Operating Voltage Range… Voltage of each model ±10%





Only standard fans (without sensors) have acquired CSA certification.

# \*172mm×51mm (Mass: 1,000g) Round type

### **Specifications Standard**

Model No.	Rated Voltage [V]	Frequency [Hz]	Input [W]	Current [A]	Locked Rotor Current [A]	Rated Speed [min <sup>-1</sup> ]	Max. [m³/min]	Airflow [CFM]	Max. Sta	tic Pressure [inchH₂0]	SPL [dB(A)]	Operating Temperature [°C]	Expected Life [h]
109-311	100			0.33/0.25	0.65/0.64	2.900/3.500	5.3/6.4	187.3/226.1	147/196	0.590/0.787	47/51	-30 to +60	25,000/60℃
109-314	115	50/60		0.29/0.22	0.55/0.54								
109-312	200			0.16/0.13	0.33/0.32								
109-313	230			0.14/0.11	0.28/0.27								

#### with Sensor

М	lodel No.	Rated Voltage [V]	Frequency [Hz]	Input [W]	Current [A]	Locked Rotor Current [A]	Rated Speed [min <sup>-1</sup> ]	Max. [m³/min]	Airflow [CFM]	Max. Stat [Pa]	tic Pressure [inchH₂0]	SPL [dB(A)]	Operating Temperature [°C]	Expected Life [h]
109	9-371	100 0.33/0.25 0.	0.65/0.64											
109	9-374	115	50/60	27/25	0.29/0.22	0.55/0.54	2,900/3,500	5.3/6.4	187.3/226.1	147/196	0.590/0.787	47/51	-10 to +60	25,000/60°C
109	9-372	200			0.16/0.13	0.33/0.32								
109	9-373	230			0.14/0.11	0.28/0.27								

Two types of power supplies, 5V (ITEM-20) and 12V (ITEM-30), are available in fans with sensor attached.

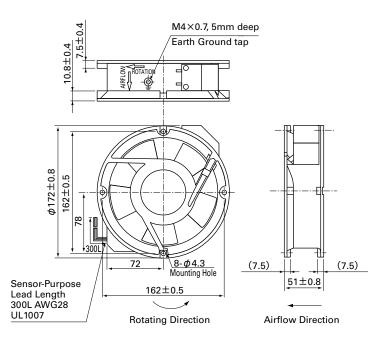
■Set Models Fan, finger guard, plug cord, screws, etc. can be purchased in one package. For details, please refer to pp. 453 to 456.

#### Dimensions (unit: mm)

#### **Standard**

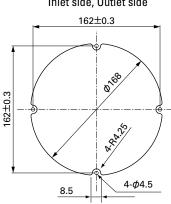
# M4×0.7, 5mm deep Earth Ground tap $\phi$ 172 $\pm$ 0.8 $162\pm0.5$ (7.5)(7.5)8-φ4.3 Mounting Hole 51±0.8 **Rotating Direction** Airflow Direction

#### with Sensor



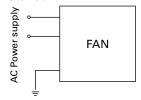
#### Reference Dimensions of **Mounting Holes and Vent Opening** (unit: mm)

Inlet side, Outlet side

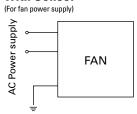


### Wiring Diagram

#### **Standard**



#### with Sensor



#### 5V (ITEM-20)



#### 12V (ITEM-30)

- rcuit	Brown +9.6V to +14.4V
Sensor circ	Yellow 200mA MAX. Pull-up resistor Sensor output GND(0V)  Yellow 427.6V MAX.

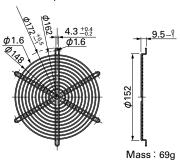
GND (Black) should be shared in case that power supply for sensor circuit (Brown) and that for sensor pull-up (Yellow) are separated.

## Options (unit: mm)

#### **Finger Guards**

Color Model: 109-319E Surface treatment: Nickel-chrome plating (silver) : 109-319H : Cation electropainting (black)

Inlet side, Outlet side

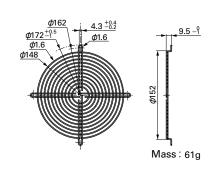


Color Surface treatment: Nickel-chrome plating (silver) Model: 109-320

Outlet side

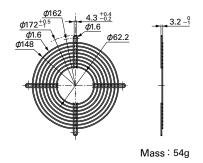
Color Model: 109-1066 Surface treatment: Nickel-chrome plating (silver)

#### Inlet side, Outlet side



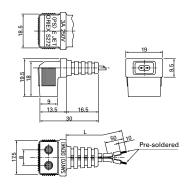
Model: 109-1068 Surface treatment: Nickel-chrome plating (silver)

Outlet side

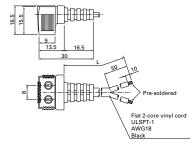


#### **Plug Cord**

(Products compliant with Electrical Appliance and Material Safety Law) Model: 489-1619-L10/489-1619-L21



(UL/CSA CERTIFIED) UL FILE No.E50197 CSA FILE No.LR67048 Model: 489-084-L10/489-084-L21

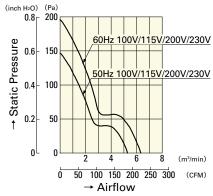


Model	Power cord length (L) [mm]	Mass [g]
489-1619-L10	1,000	34
489-1619-L21	2,100	64
489-084-L10	1,000	37
489-084-L21	2,100	70

### Airflow - Static Pressure Characteristics

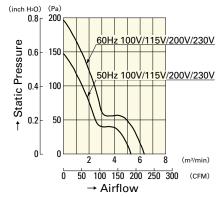
Mass: 53g

#### Standard



109-311	109-314
109-312	109-313

#### with Sensor



109-371	109-374
109-372	109-373