## **Thermal Speed Controlled Fan**



# San Ace 60

15mm thick, 20mm thick, 25mm thick External thermistor model / **Built-in thermistor model** 

# General Specifications

· Material · · · · Frame: Plastics (Flammability: UL94V-0),

Impeller:Plastics (Flammability: UL94V-1)

· Life Expectancy ······· Varies for each model (L10:Survival rate:90% at 60°C,

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

 $\cdot \, \mathsf{Lead\,Wire} \,\, \cdots \cdots \,\, \, \oplus \mathsf{red} \,\, \bigcirc \mathsf{black} \,\, \boxed{\mathtt{Control}} \,\, \mathsf{brown} \,\, \mathsf{(Only\,for\,external\,thermistor\,type)}$ 

 $\cdot$  Fail-safe  $\cdot \cdot \cdot \cdot$  The motor becomes high speed when the thermistor is unable

to detect the temperature in case of open or short circuit etc. (Models equipped with a pulse sensor are excluded.)

· Storage Temperature ··· −30°C to +70°C (Non-condensing)



Note: Optional external thermistors are sold separately.

# 60×60×15mm (Mass: 60g)

# **Specifications** External thermistor model

	Model No.	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input	Rated Speed	Air F	low	Static	Pressure	SPL	Operating Temperature	Life Expectancy	
		[V]	[V]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> O]	[dB(A)]	[°C]	[h]	
	109P0612T7H12	12	10.2 to 13.8	0.12	1.44	4,100	0.4	14.1	38.2	0.153	32	-10 to +70	60,000	
				0.08	0.96	2,050	0.2	7.1	9.3	0.037	18			

Note: The top row gives characteristics shown when the thermistor temperature is  $35^{\circ}$ C, while the bottom row gives characteristics shown when the thermistor temperature is  $28^{\circ}$ C (Thermistor: 169-002).

#### **Built-in thermistor model**

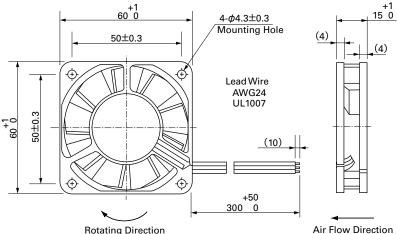
Model No.	Rated Voltage	Operating Voltage Range	Rated Current	Rated Input	Rated Speed	Air Flow		Static Pressure		SPL	Operating Temperature Life Expectance	
Wiodel No.	[V]	[V]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH2O]	[dB(A)]	[°C]	[h]
109P0612T7H122	12	10.2 to 13.8	0.12	1.44	4,300	0.42	14.8	42.0	0.169	32	-10 to +70	60,000
103700121711122			0.08	0.96	2,100	0.2	7.0	9.7	0.039	18		

Note: The top row gives characteristics shown when the emperature is  $40^\circ\text{C}$ , while the bottom row gives characteristics shown when the temperature is  $30^\circ\text{C}$ .

## Dimensions (Unit : mm)

#### External thermistor model

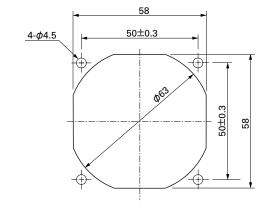
215



# **Rotating Direction** Built-in thermistor model 60 0 50±0.3 Lead Wire AWG24 UL1007 +50 300 (10) 4-φ4.3±0.3 Mounting Hole **Rotating Direction** Air Flow Direction

## Reference dimensions of mounting holes and vent opening (Unit:mm)

#### Inlet side, Outlet side

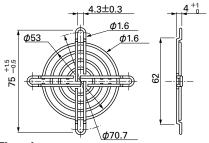


# Options (Unit:mm)

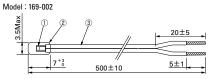
#### **Finger guards**

Surface treatment : Nickel-chrome plating (silver) Cation electropainting (black)

## Inlet side, Outlet side



#### **Thermistor**

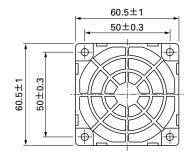


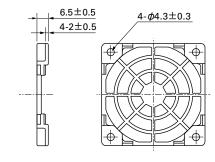
Number	Name	Standards,materials, etc.							
1	Thermistor	Chip							
2	Insulated cord	Epoxy resin							
3	Lead	UL2555 CSA TR-64 AWG#28 (blue)							
Item		Spec							
2-1	Resistance	R25 6.8KΩ±3%							
2-2	B constant	B25/50 3950K±2%							
2-3	Maximum rated power	188mW (25°C under still air)							
2-4	Insulation resistance	100MΩor more (DC500V megger)							
2-5	Dielectric strength	No problem (AC1500V 1 minute)							
2-6	Operating temperature range	-30°C to +80°C							
2-7	Storage temperature range	-40°C to +100°C							

Manufactured by OHIZUMI MFG CO.,LTD.

Mfr. Part No. 159-682-86

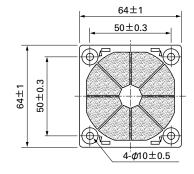
# **Resin finger guards**

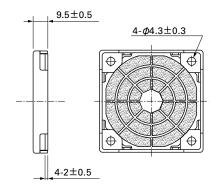




#### **Resin filter kits**

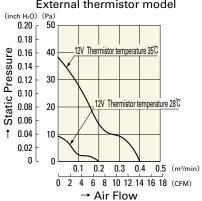
Model: 109-1003F13 (13PPI), 109-1003F20 (20PPI) : 109-1003F30 (30PPI), 109-1003F40 (40PPI)





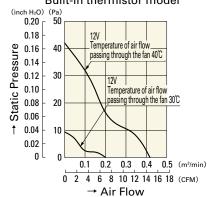
#### **Air Flow and Static Pressure Characteristics**

#### External thermistor model



# 109P0612T7H12

# Built-in thermistor model

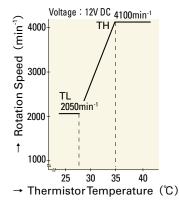


## 109P0612T7H122

## **Temperature-Rotation Speed Characteristics**

#### External thermistor model

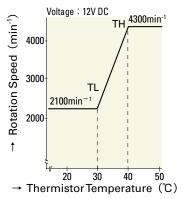
■ Characteristics of Thermistor-detected Temperature vs Speed



109P0612T7H12

#### Built-in thermistor model

■ Typical characteristics of temperature of air flowing through the fan versus rotation speed



109P0612T7H122