

AIT

Active In-car Temperature Sensor



An integrated, low-noise fan draws a greater volume of cabin air across the temperature sensor, providing a faster response as compared to traditional passive sensors. This can result in a more accurate climate control, leading to better cabin comfort. This sensor can also help improve the efficiency of the temperature control system by reducing the on / off cycles of the heating and cooling system.

Applications

- For in cabin vehicle temperature measurement for vehicles that have an automated temperature control system

Features

- Existing field proven design
- Fast Response
- Accuracy maximizes driver/passenger comfort
- Ultra-low noise, high air flow optimised system design
- Coreless Type Motor
- Small size & flexible packaging facilitates installation & service
- Low current consumption
- Long-term stability – even in extreme humidity environments
- Alternate RvT curves available
- Available with/without humidity sensor
- Electronics integrated into one assembly with the temperature sensor.
- Different geometries to meet package requirements

Specifications

R @ 25°C

30.0 kΩ ±1.2%

B (0/50)

3887K ±1%

Operating Temperature Range

-40°C to 85°C

Storage Temperature Range

-40°C to 85°C

Response Time

< 10 seconds (25°C to > 85°C in OIL)

Housing Material

PP-(GF+TD)15

NTC Part Number

TC330S39FB

Weight

29.5 grams/piece

Air Flow Volume

Minimum 1.2 m/s (at 23 ±5°C, 13.5 ±0.1V), inlet

Operating Current

70.0mA Maximum (at 14.0 ±0.1V)

Rated Voltage

12.0V

Minimum Starting Voltage

9.0V MAX

Noise

38.0dB MAX (at 12.0±0.1V)

Connector

YAZAKI 7282-8663

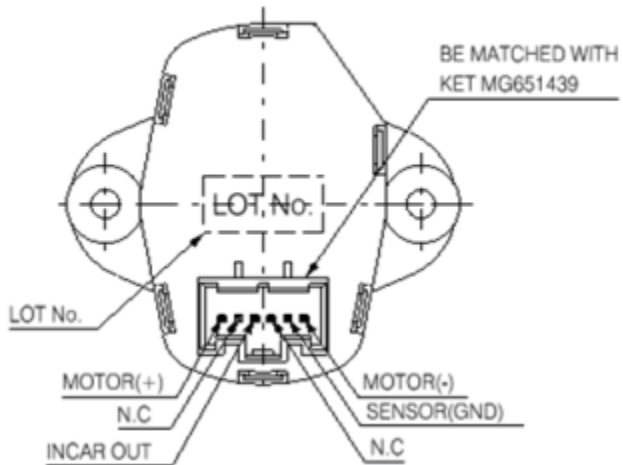
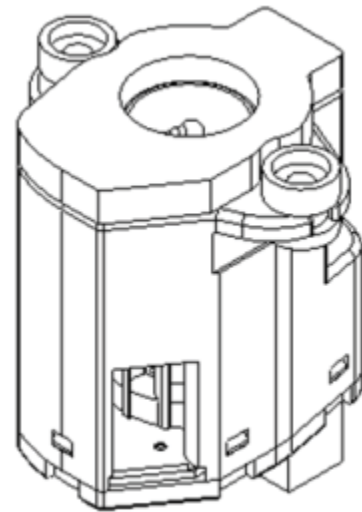
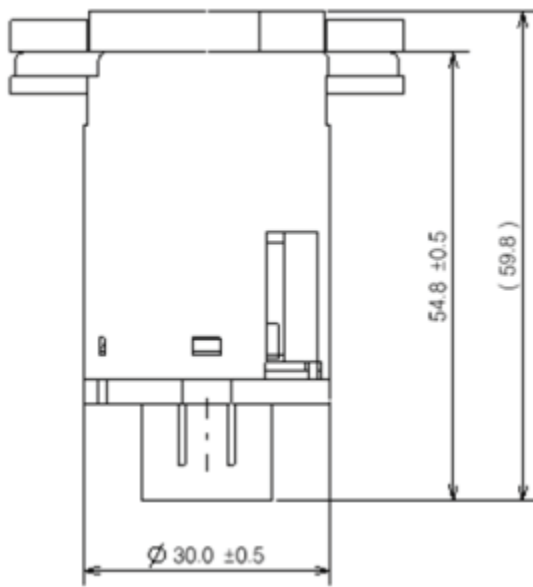
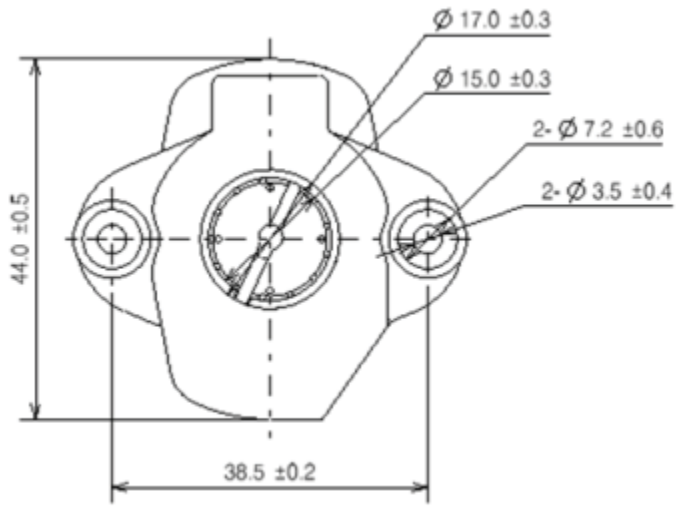
Mating Connector

KET MG651439

Resistance and Temperature Accuracy

Temp. (°C)	Tolerance (%)	R (KOhms)	Tolerance (%)
+60	-0.73/+0.71	7.463	±2.6
+50	-0.59/+0.58	10.810	±2.2
+35	±0.39	19.590	±1.6
+25	±0.27	30.000	±1.2
+15	-0.36/+0.35	47.130	±1.7
0	-0.47/+0.46	97.710	±2.4
-15	-0.58/+0.57	216.100	-3.1/+3.2
-30	-0.69/+0.67	509.600	-4.0/+4.1

Drawing



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