

T H E R M O M E T R I C S
A C O M M I T M E N T T O E X C E L L E N C E

IAT

Intake Air Temperature Sensor



The intake air temperature sensor measures temperature of the air into the engine and reports to the engine control unit (ECU) to accomplish optimal combustion. The ECU uses this information to optimize the fuel delivery, and the air-to-fuel ratio produces efficient combustion.

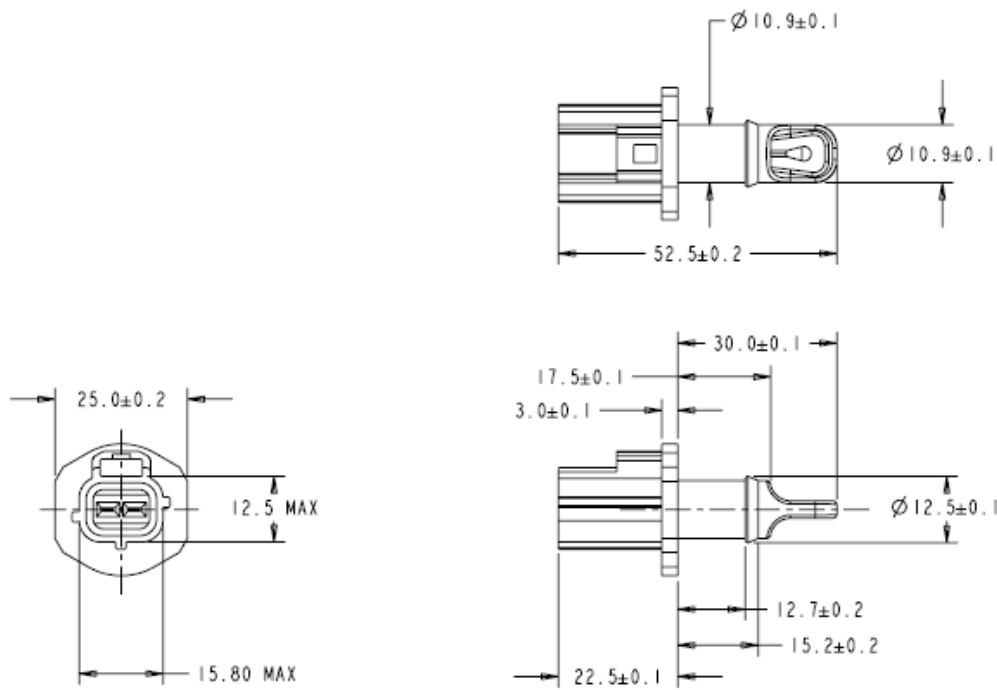
Applications

- Intake Air Temperature

Features

- High accuracy and long term stability @ 185°C
- Fast response time
- Snap-fit housing eliminates wiring insulation damage
- Design for easy installation & service
- Integral connector
- Alternate RvT curves available
- Other resistance and beta values available
- Different geometries to meet package requirements

Amphenol
Advanced Sensors



Specifications

R @ 20°C

2500 $\Omega \pm 9.56\%$

B (25/85)°C

3541K

Operating Temperature Range

-40°C to 120°C

Storage Temperature Range:

-40°C to 130°C

Temperature Accuracy

$\pm 2.37^\circ\text{C}$ at 20°C

Response Time

≤ 6 seconds from 20 to 100°C

10 seconds from 100 to 20°C in water

Housing Material

PBT GF30 Tan

NTC part number

0703-1272-76-S9

Weight

8.7 grams

Connector

Mates with AMP 184004-1

Mating Connector

AMP 184004-1

Resistance vs. Temperature Data

Resistance = 2500.0 Ohms at 20.00 °C Rtol. @ 25°C 9.56%

Temp. (°C)	Rnominal (ohms)	Res. Tol. $\pm\%$	Rmin. (Ohms)	Rmax. (Ohms)
-20.00	14968	15.76	12,609.00	17,327.00
-10.00	9176	14.10	7,878.00	10,473.00
20.00	2500	9.56	2,261.00	2,739.00
60.00	612.0	11.53	541.40	682.50
80.00	337.3	12.75	294.30	380.30
120.00	120.0	14.68	102.40	137.60

Amphenol
Advanced Sensors

www.amphenol-sensors.com

© 2014 Amphenol Corporation. All Rights Reserved. Specifications are subject to change without notice.
Other company names and product names used in this document are the registered trademarks or
trademarks of their respective owners.

AAS-920-536A-03/2014