THERMOMETRICS
A COMMITMENT TO EXCELLENCE

GE-1856

Intake Air Temperature Sensor (IAT)

Thermometrics GE-1856 Intake Air Temperature Sensor (IAT) monitors the temperature of the incoming intake air for an engine and provides a signal output that is proportional to air temperature. This signal can be used as an input to provide a signal to an Engine Control Unit (ECU), which uses this information to adjust fuel delivery and optimize the air-to-fuel ratio to produce the most efficient combustion. GE-1856 is also suitable for air duct temperature measurement in non-condensing HVAC applications.

Applications

- Intake Air Temperature
- Duct Air Temperature

Features

- High accuracy and long-term stability
- Fast response time
- Designed for easy installation and service
- Integral sealed connector
- Alternate RvT curves possible
- Other resistance and beta values possible

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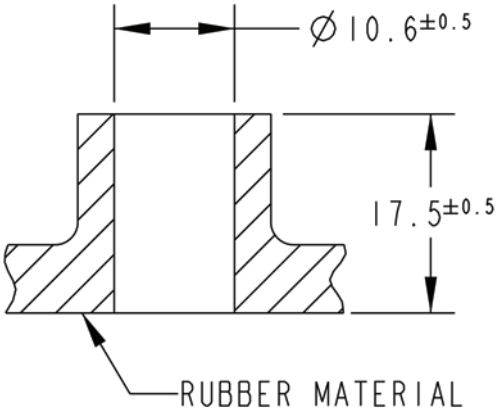
GE-1856 Specifications

- **Operating Temperature Range:** -40°C to 125°C
- **Storage Temperature Range:** -40 to 130°C
- **R @ 25°C :** 2049 ± 9.93%
- **Beta (25/85)°C:** 3541K
- **Response Time:** ≤6 seconds from 20°C to 100°C in stirred water
- **Housing Material:** PBT GF30 Tan
- **Connector:** AMP Sealed Connector System (SCS)
- **Mating Connector:** AMP P/N 184004-1 (Key C)
- **Thermistor Material System:** S7.6

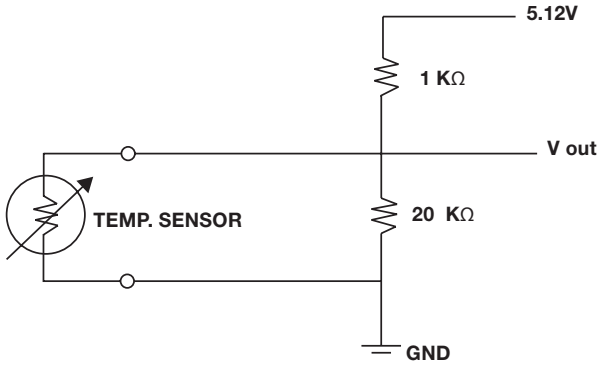
R vs. T			
Temp. (°C)	Resistance (Ω)	Resistance Tolerance (±%)	Tolerance (-) (°C)
-20	14968	15.76	3.05
-10	9176	14.10	2.91
20	2500	9.56	2.37
25	2049	9.93	2.53
60	612.0	11.53	3.59
80	337.3	12.75	4.43
120	120.0	14.68	6.14

GE-1856 Dimensions

Mounting Interface



Typical Application Circuit



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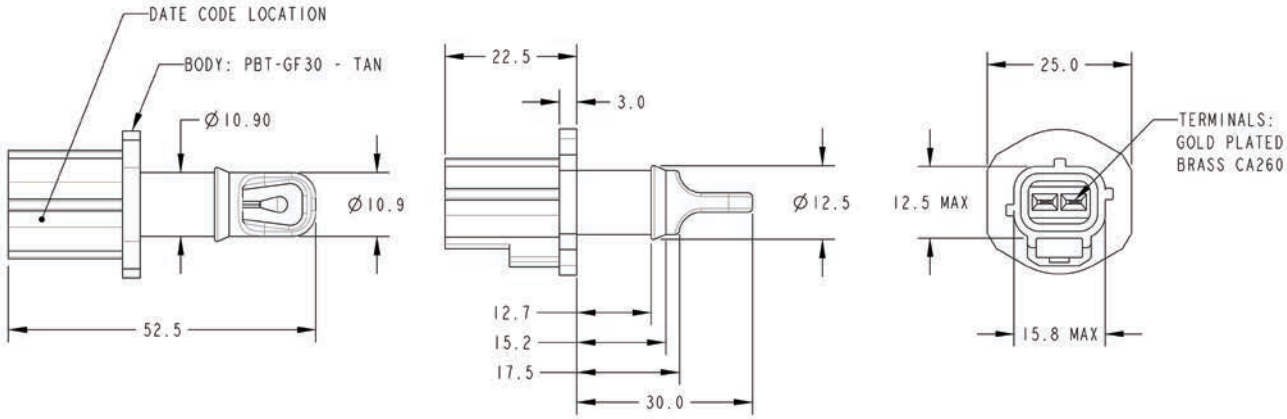

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