

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

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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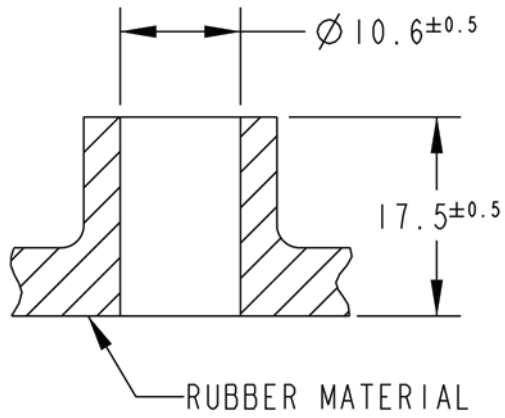
GE-1856 Specifications

- **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

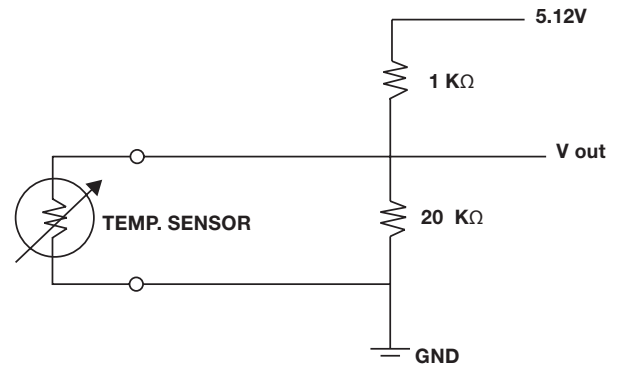
R vs. T			
Temp. (°C)	Resistance (Ω)	Resistance Tolerance (±%)	Tolerance (-) (°C)
-20	14968	15.76	3.05
-10	9176	14.10	2.91
20	2500	9.56	2.37
25	2049	9.93	2.53
60	612.0	11.53	3.59
80	337.3	12.75	4.43
120	120.0	14.68	6.14

GE-1856 Dimensions

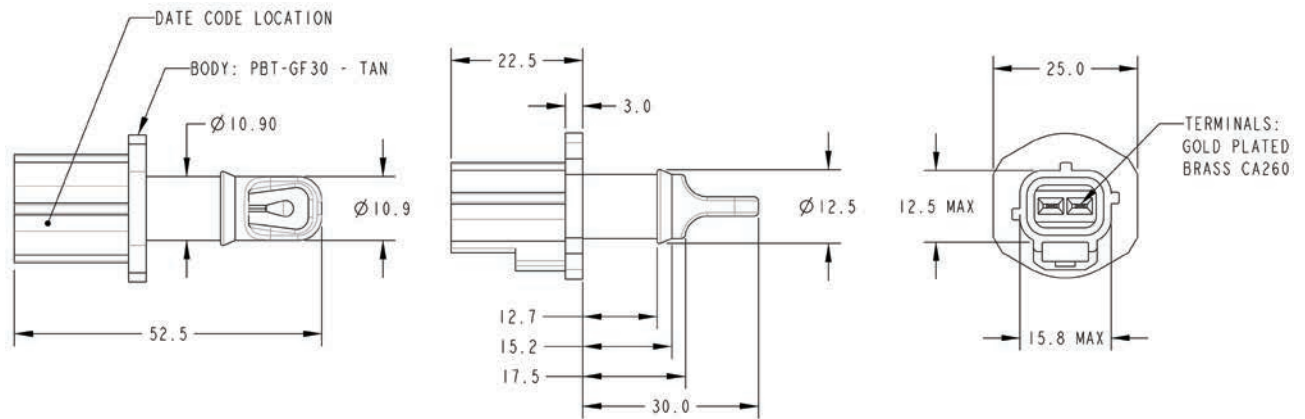
Mounting Interface



Typical Application Circuit



GE-1856



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