THERMOMETRICS
A COMMITMENT TO EXCELLENCE

Inline Flow-Through Coolant Temperature Sensor (CTS)

for Automotive & Industrial Applications

The water temperature sensor monitors the temperature of the coolant that is being pumped around the engine block to cool the engine. This sensors purpose is to notify the driver of the vehicle if the engine starts to overheat. The goal is to relay an over temperature engine temperature to the driver so that the vehicle can be stopped and the engine switched off before any permanent damage to the engine is done.

Applications

- Engine Coolant Temperature
- Battery Pack Coolant Line Temperature
- Process flow measurement
- HVAC water management
- Appliance

Features

- High Sensitivity
- Fast Response Time
- Wide Application Range
- Compact Design
- SAE J-1231 Interface
- USCAR Sealed Connection System

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CTS Specifications

R @ 77°F (25°C)
10 KΩ ± 1.5%

B (25/85)°C
3957 – 3990

Operating Temperature
-40°F to 248°F (-40°C to 120°C)

Storage Temperature
-40°F to 302°F (-40°C to 150°C)

Response Time
~15 seconds in flowing water

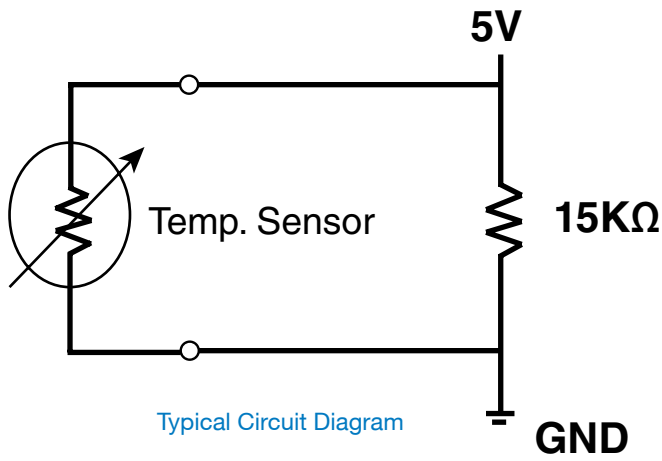
Housing Material
Polyamide 6/6

Weight
~14 grams

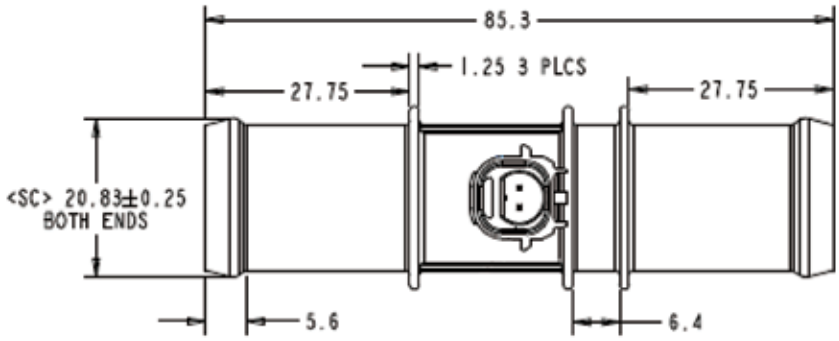
Mating Connector
US Car 064-S-002-1 –Z02 Index Option "A"

Mechanical
Tube Internal and External Dimensions & Tolerances to meet SAE J-1231 for -12 hose size

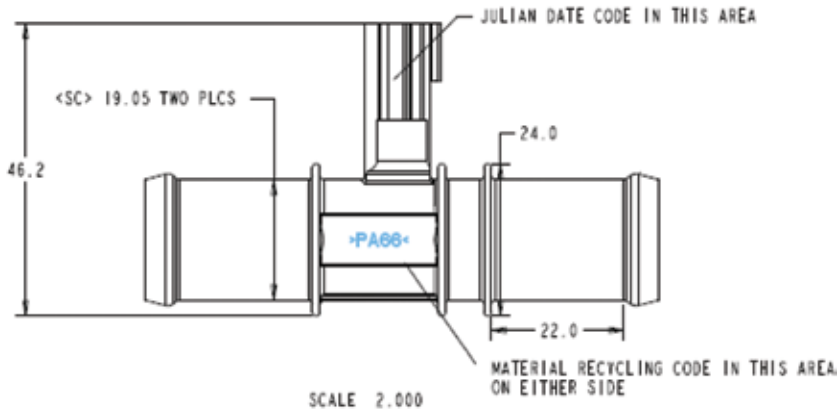
Part Number
GE-1935



Typical Circuit Diagram



CTS Dimensions



CTS Labeling Schematic

RvT Table		
Temp (°C)	R_{nom} (Ω)	Tol (±)
-40	332776	5.95%
-20	96481	4.24%
-10	55109	3.46%
0	32566	2.71%
10	19869	2.19%
20	12486	1.72%
25	10000	1.50%
40	5331	2.11%
50	3606	2.47%
60	2490	2.84%
70	1754	3.16%
85	1071	3.58%
100	678.1	5.56%
120	338.2	7.00%

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