

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

# Inline Flow-Through Coolant Temperature Sensor (CTS)



## for Automotive & Industrial Applications

The flow-through temperature sensor monitors the temperature of a fluid that passes through it. This temperature reading is then inputted into a system control module that uses the temperature reading to control the overall system temperature via a control loop. This could be engine temperature, heater temperature, industrial supply temperature, etc.

### 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

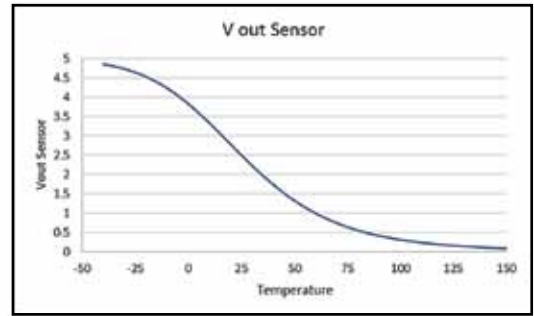
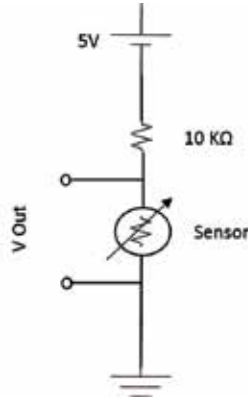
Housing Material  
Polyamide 6/6

Weight  
~14 grams

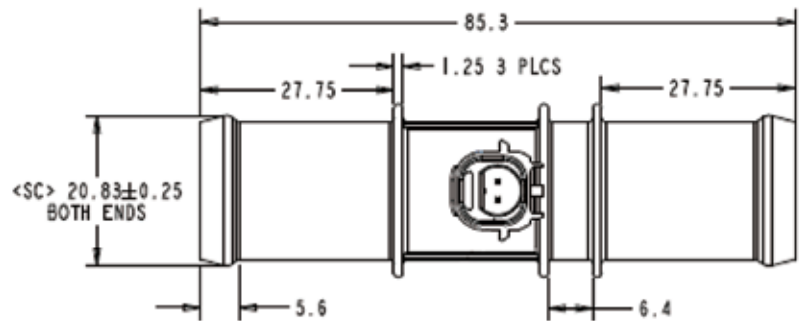
Mating Connector  
US Car 064-S-002-1 –Z02 Index Option “A”

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

Part Number  
GE-1935

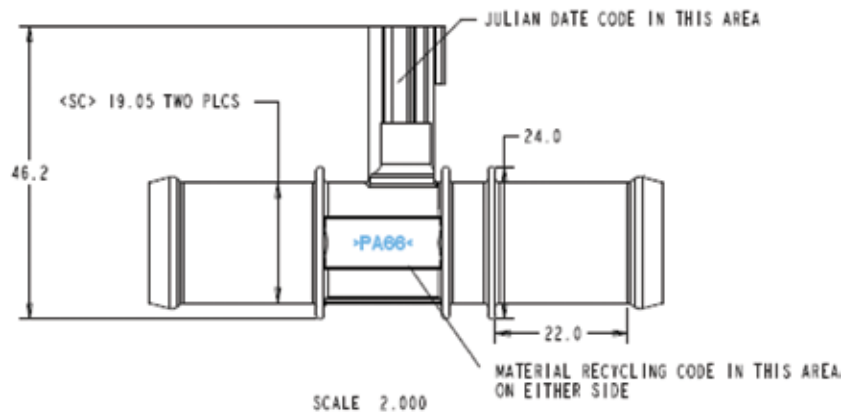


Typical Circuit Diagram



CTS Dimensions

RvT Table		
Temp (°C)	R <sub>nom</sub> (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%



CTS Labeling Schematic

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