

# Surface Mount Foam Sensor (SMF)

Thermometrics Surface Mount Foam Sensor (SMF): a highly adaptable sensor designed for direct mounting on almost any surface, offering precise temperature monitoring. Specifically designed for applications such as battery management and HVAC control, the SMF boasts a unique design featuring a low thermal mass sense element coupled with adhesive backed compressible foam.

This innovative design ensures rapid response times and exceptional temperature accuracy by exposing the sensing element to the sensing surface. The backside of th sensing element is then covered with compressible foam that not only adds consistent normal force to the sensing element but also thermally isolates the ambient influences, further promoting accuracy.

Ideal applications are where the SMF can be placed between a flat sense surface and a backing plate, such as between battery cells and cover or on between a boiler and insulation.

## **Features**

- Accurate and Robust
- · Thermally Isolated
- Fast Response Time
- Robust design in a variety of applications
- · Easily customized upon request

## **Applications**

- Battery Modules
- Hot / Processing Water Tanks
- Server Racks
- Consumer Electronics
- Fuel Cell



# Surface Mount Foam Sensor (SMF) Specifications

Operating Temperature Range:

-40°C to 105°C

Beta (25/85)°C:

3435K ± 1.0%

Storage Temperature Range:

-20°C to 45°C

 $10,000\Omega \pm 2.0\%$ 

Temperature Accuracy:

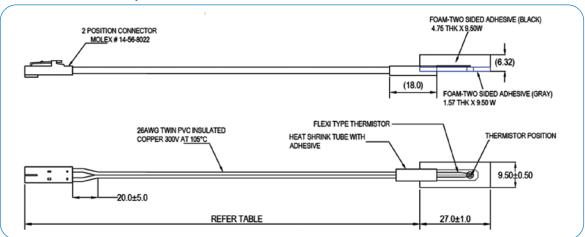
R @ 25°C ± 0.3°C

R @ 25°C: Connector:

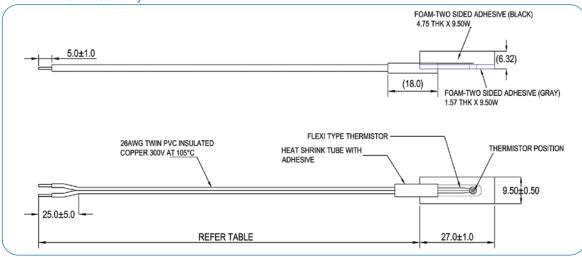
Molex: 14-56-8022

Available Configurations		
Part No.	Wire Length	Termination
JNI103C4R2L151	150 ±5.0	Molex Connector
JNI103C4R2L251	250 ±5.0	Molex Connector
JNI103C4R2L151S	150 ±5.0	Stripped Ends
JNI103C4R2L251S	250 ±5.0	Stripped Ends

### NTC Thermistor Assembly With Connector



#### NTC Thermistor Assembly Without Connector





## www.amphenol-sensors.com