

# **Automotive Sensor Products**

## **Diesel Fuel Heater – Post Style**



## **General Description**

At low temperatures paraffin drops out of diesel fuel. This paraffin clogs the fuel filter, making the cranking and the run of the vehicle difficult or even impossible. The Fuel Heater warms up the fuel before the filter, keeping the paraffin in liquid phase and assuring the cranking and the running of the vehicle at low temperatures.

#### **Features**

- Self regulated PTC heating elements
- 180W @ 13.5V power rating
- NTC temperature sensing
- Integrated electronic thermostat
- Over voltage and reverse polarity protected
- Choice of connectors and terminals

#### **Benefits**

- Robust construction makes this heater well suited to harsh environments
- Completely stand-alone functions, no need of external components like temperature probe or power switch
- Over voltage and reverse polarity protected
- PTC self regulates the power absorption in function of fuel flow and temperature
- Solid state design with no mechanical contact assure high reliability and life time

## **Applications**

 All diesel engines: passenger cars, commercial vehicles, power generator, etc.

# **Operation**

### **Basic Principle**

The integrated NTC sensor continuously monitors the fuel temperature. When it reaches a value such that the paraffin may agglomerate the heating elements are switched on, increasing the temperature of the fuel before it reaches the filter. When the incoming fuel temperature rises to a safe level, the heater automatically switches off, achieving power saving of the vehicle.

#### **Packaging Options**

Custom packaging can be provided to meet any need, please contact Littelfuse Engineering for details.



# **Automotive Sensor Products**

### **Functional Characteristics**

Parameter			
Туре			
PTC Fuel Heater			
Thermostat			Built-in – Electronic
Electrical			
Voltage	Min.	V	8V
	Max.	V	16V
Thermostat	Switching ON	°C	0°C +/-2°C
	Switching OFF	°C	5°C +/-2°C
Rating	Power	W	180W @ 13.5V
Skin Temperature	Max.	°C	160°C
Environmental/Mechanical			
Temperature	Operating	Celsius	-30° to +130°
	Storage	Celsius	-30° to +130°

### Littelfuse

Website: www.littelfuse.com

Sales Support: ALL\_Autosensors\_Sales@littelfuse.com
Technical Support: ALL\_Autosensors\_Tech@littelfuse.com

Information provided by Littelfuse is believed to be accurate and reliable.

All rights reserved. Trademarks and registered trademarks are the property of their respective owners.

Littelfuse products are designed for specific applications and should not be used for any purpose (including, without limitation, automotive applications) not expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse product documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse product documentation.