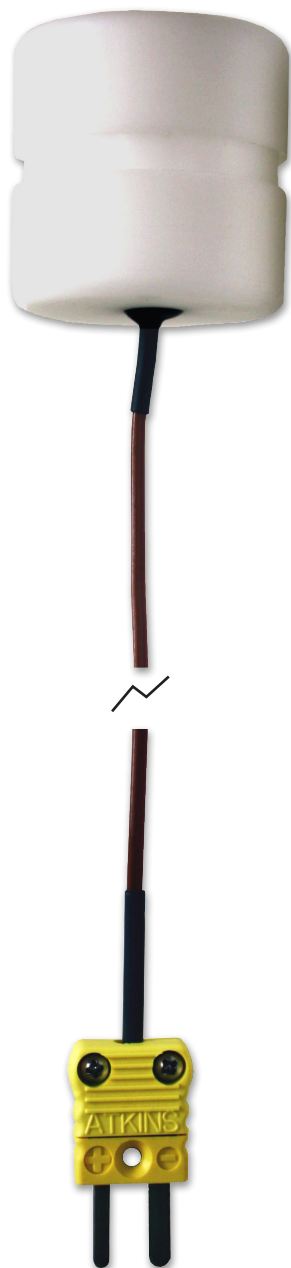


# Thermocouple Solid Simulator

## 52048-K

The Thermocouple Solid Simulator does not measure air temperature, It simulates food product temperature in changing ambient conditions of any refrigerator, freezer, walk-in or delivery truck and further supports a food safety program. This unique product is thermocouple based and made of FDA approved material. The temperature of the Solid Simulator will display immediately when plugged into any Type K Thermocouple Instrument\*.



**ACTUAL  
SIZE**

**Measure Food  
Temperature Instantly!  
Walk In and Plug In!**

*See the back page for test results*

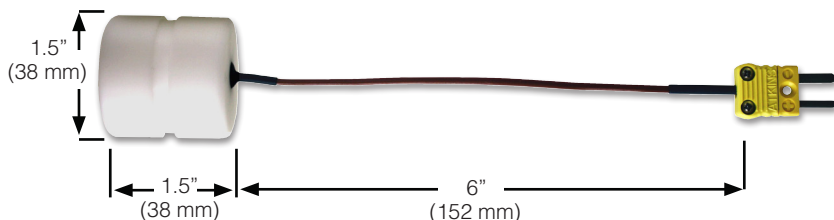
### Specifications

- Temperature Range: -40° to 180°F (-40° to 82°C)
- 1.5" x 1.5" diameter (38 mm x 38 mm)
- FDA approved material
- Cord Length: 6" (152 mm)
- Flexible cable with PTFE jacket
- Weight: 2.5 oz (71 g)
- 12" cable tie included for mounting
- Patent Pending
- 1-year warranty

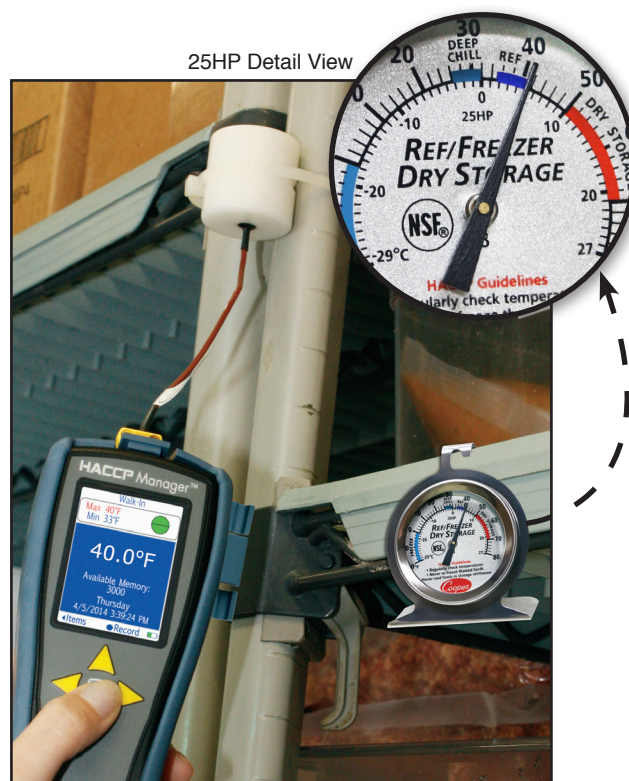
*\*Simulator must stabilize for 2 hours before first readings are taken.*

### Packaging

- Individual Package Weight: 5 oz (142 g)
- Package Dimensions: 9" x 4.375" x 2.125"  
(229 mm x 111 mm x 54 mm)
- Package Cube: 0.05
- Units per package (1)



25HP Detail View

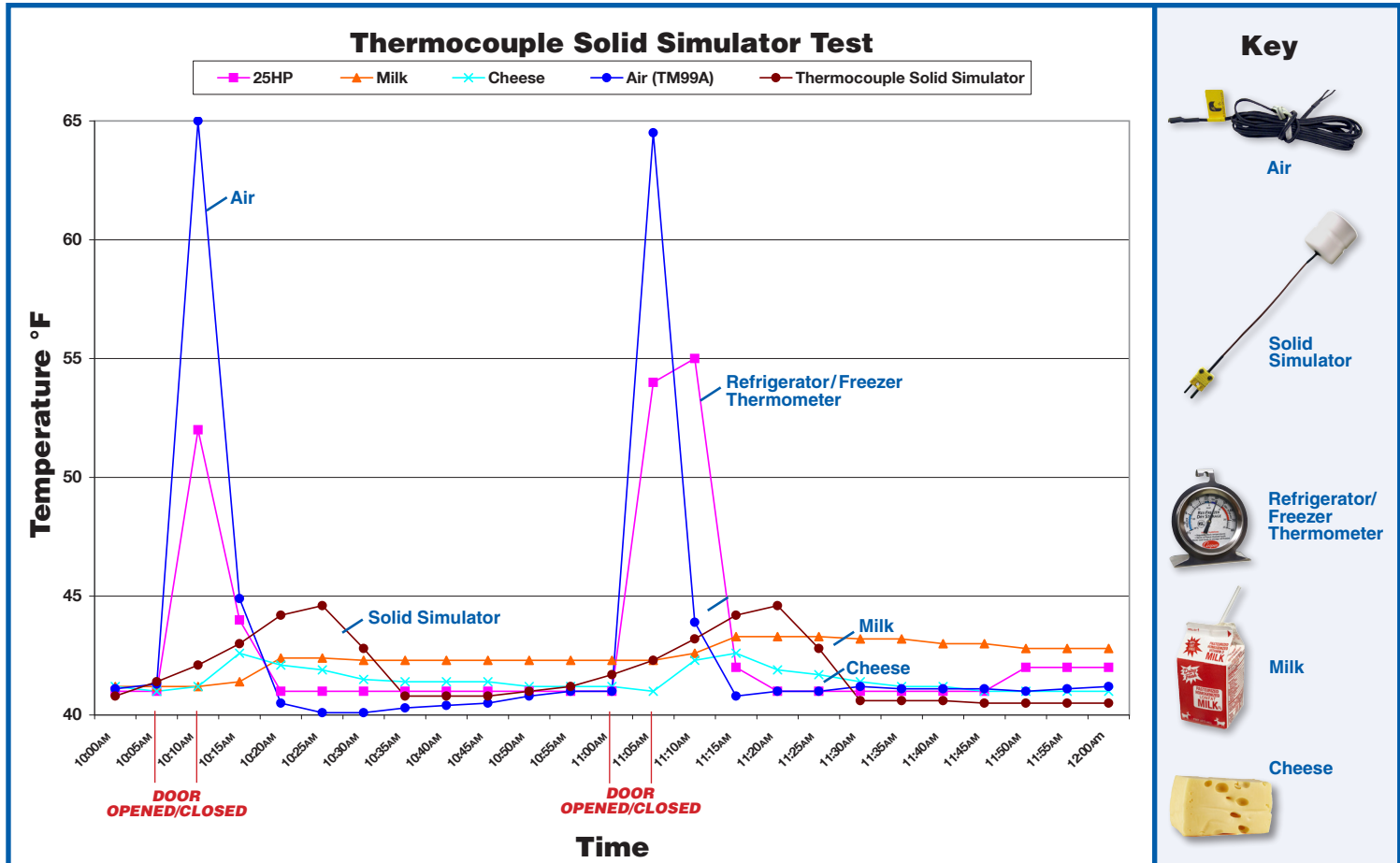


**Accuracy to the Highest Degree**

Cooper-Atkins Corporation • 800-835-5011 • 860-347-2256 • [www.cooper-atkins.com](http://www.cooper-atkins.com)

# Thermocouple Solid Simulator Test

The Thermocouple Solid Simulator, 25HP Refrigerator/Freezer Thermometer, 2033 Air Probe, (8 oz.) carton of milk and (8 oz) block of cheese were placed in an environmental chamber with a glass door for two hours. Once the thermometers and probes were allowed to stabilize at 41°F, the chamber door was left open for 5 minutes, then shut for an hour, and the process was then repeated. The temperatures were recorded every five minutes. The chart below shows the thermometer temperatures compared to the temperatures of the food product in the changing ambient conditions of the chamber.



When the chamber door was left open for 5 minutes, the air temperature rose drastically. The temperature of the Solid Simulator only fluctuated by a few degrees.

## Temperature Results in °F:

Time	Air	Solid Simulator	25HP	Milk	Cheese
10:00am	41°	41°	41°	41°	41°
10:05am	41°	41°	41°	41°	41°
10:10am	65°	42°	52°	41°	41°
10:15am	45°	43°	44°	41°	43°
10:20am	41°	44°	41°	42°	42°
10:25am	40°	45°	41°	42°	42°
10:30am	40°	43°	41°	42°	42°
10:35am	40°	41°	41°	42°	41°
10:40am	40°	41°	41°	42°	41°
10:45am	41°	41°	41°	42°	41°
10:50am	41°	41°	41°	42°	41°
10:55am	41°	41°	41°	42°	41°

Time	Air	Solid Simulator	25HP	Milk	Cheese
11:00am	41°	42°	41°	42°	41°
11:05am	65°	42°	54°	42°	41°
11:10am	44°	43°	55°	43°	42°
11:15am	41°	44°	42°	43°	43°
11:20am	41°	45°	41°	43°	42°
11:25am	41°	43°	41°	43°	42°
11:30am	41°	41°	41°	43°	41°
11:35am	41°	41°	41°	43°	41°
11:40am	41°	41°	41°	43°	41°
11:45am	41°	41°	41°	43°	41°
11:50am	41°	41°	42°	43°	41°
11:55am	41°	41°	42°	43°	41°
12:00pm	41°	41°	42°	43°	41°