

HVSO5F5

## Temperature Sensor IC

ROHM offers a broad lineup of ultra-compact, low current consumption thermostat output temperature sensors optimized for temperature monitoring and overheating protection in compact devices of all types. The **BDJxxxxHFV** series integrates a temperature detection element, constant current circuit, and high precision reference power source in a single chip. Additional features include low current consumption (7.5 $\mu$ A – 50% less than conventional products), built-in power down function, high analog output temperature sensitivity, precision thermostat, detection temperature hysteresis, and precise analog output ( $\pm 2.5^{\circ}$ C). Multiple models are available in a range of detection temperatures, from 55 $^{\circ}$ C to 90 $^{\circ}$ C in 5 $^{\circ}$ C intervals. The units are available in a compact HVSO5F5 package – 70% smaller than conventional SSOP5 packages.

### Applications

- Power utility: solar, metering, monitors
- Transportation storage: food, liquid, hazardous materials
- Security and alarm systems
- Appliances

### Pricing

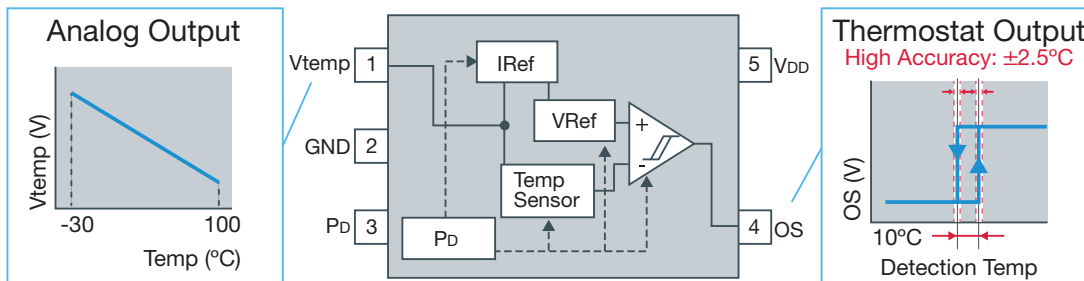
Quantity per reel: 3,000 pieces  
Price: \$0.55 to \$0.65  
Samples: Available now

### Compatible with Analog Output

Linear detection over a wide temperature range eliminates the need for external circuitry for analog output.

### Key Features

- Wide detection temperature range: 55 $^{\circ}$ C to 90 $^{\circ}$ C, in 5 $^{\circ}$ C increments
- High accuracy thermostat:  $\pm 1.0^{\circ}$ C (typ.) @ Ta=55 to 90 $^{\circ}$ C
- Low supply current: 7.5 $\mu$ A
- High accuracy analog output:  $\pm 1.0^{\circ}$ C (typ.) @ Ta=-30 to 100 $^{\circ}$ C
- Broad power supply voltage range: 2.4V to 5.5V
- Integrated power down function
- Compact package: 1.6mmx1.6mmx0.6mm
- High analog output temperature sensitivity: -8.2mV/ $^{\circ}$ C
- Low thermal resistance: 187 $^{\circ}$ C/W typ.
- High ESD resistance: 8kV (HBM)



### More Info

[http://www.rohm.com/products/lsi/sensor/temperature\\_sensor/power\\_down/](http://www.rohm.com/products/lsi/sensor/temperature_sensor/power_down/)  
<http://www.rohm.com/news/080902.html>

