

Featured Products



High accuracy • Ultra-low current consumption

40V Window-Type Voltage Detectors (Reset ICs)

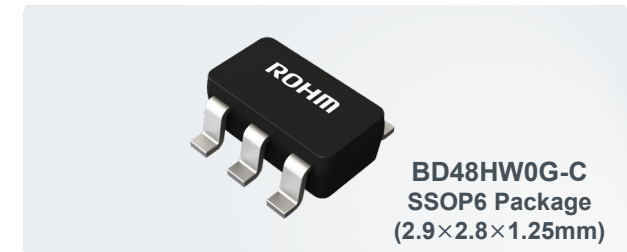
BD48HW0G-C



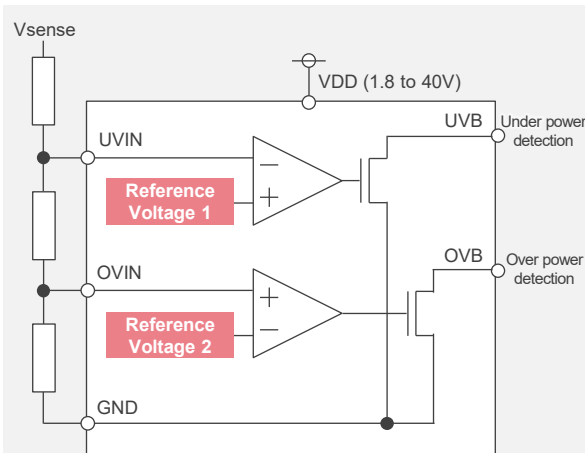
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*ROHM June 2022 study

- Class-leading* voltage detection accuracy: $\pm 0.75\%$ (over the entire temp. range)**
 Two built-in reference voltage circuits enable high accuracy detection in both the low-and high-voltage regions
- Achieves ultra-low 500nA (0.5 μ A) current consumption with Nano Energy™**
 Contributes to longer life in battery-driven equipment and reduced dark current in automotive systems
- Freely set the detection voltage with external resistance**
 The high/low side detection can be arbitrarily set along with the independent reset detection output (Dual output)

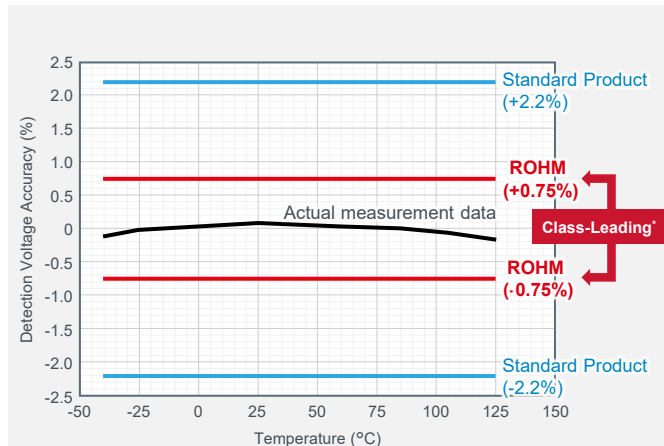


Block Diagram



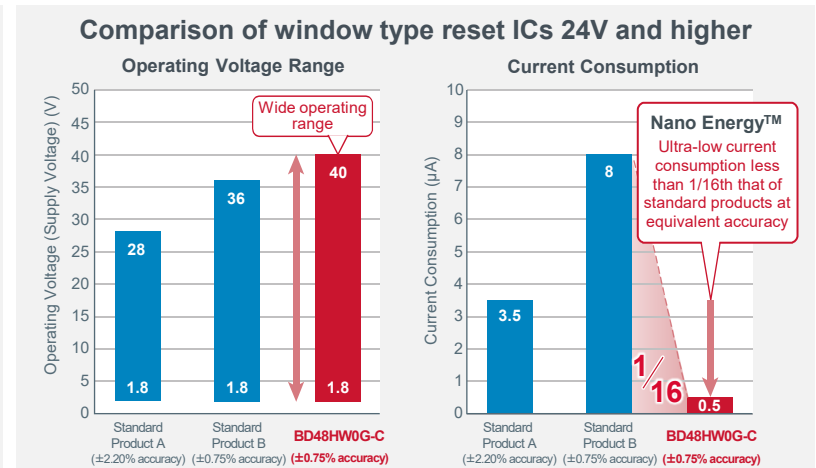
Two independent reference voltage circuits enable detection of voltage drops and rises with high accuracy

Voltage Detection Accuracy



Achieves class-leading* voltage detection accuracy over the entire temperature range

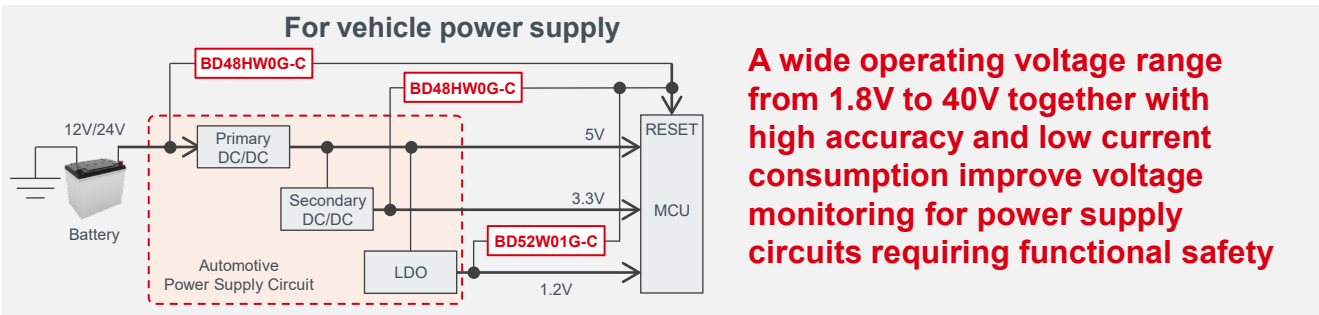
Operating Voltage/Current Consumption Comparison



Wide operating range + Best-in-class* detection accuracy

Enables circuit design without worrying about increased power consumption

Voltage Monitoring Circuit



Applications

- Automotive: HEV/EV inverters, ECUs, ADAS, car navigation, vehicle AC
- Industrial: FA equipment, measurement instruments, servo systems, sensor devices

40V Window-Type Voltage Detector (Reset IC) Lineup

Flexible Detection Voltage Type

Part No.	Operating Voltage (V)	Voltage Detection Precision Within The All Temperature (%)	Over Voltage Detection (V)	Low Voltage Detection (V)	Output Type	Current Consumption (nA)	Hysteresis Voltage (V)	“L” Output Current (mA)			RESET Active Timeout Period (ms)	Operating Temperature (°C)	Package	ComfySIL™ Functional Safety*	Automotive-Grade AEC-Q100
								V _{DD} =1.6V	V _{DD} =1.8V	V _{DD} =2.4V					
New Nano BD48HW0G-C	1.8 to 40	±0.75	1.277	1.277	Open Drain	500	V _{DET} ×0.01	-	2	-	17	-40 to +125	SSOP6	FS supportive	YES
BD48W00G-C	1.6 to 6.0	±2.5	1.20	1.20				1	-	2					

Flexible Delay Time Type

Part No.	Operating Voltage (V)	Voltage Detection Precision Within The All Temperature (%)	Over Voltage Detection (V)	Low Voltage Detection (V)	Output Type	Current Consumption (nA)	Hysteresis Voltage (V)	“L” Output Current (mA)		Reset Release Transfer Delay Time (ms)	Delay Time Precision (%)	Operating Temperature (°C)	Package	ComfySIL™ Functional Safety*	Automotive-Grade AEC-Q100
								V _{DD} =1.6V	V _{DD} =2.4V						
Nano BD52W01G-C	1.6 to 6.0	±5	1.32	1.08	Open Drain	300	V _{DET} ×0.01	1	2	Adj	±50 (All Temp.)	-40 to +125	SSOP6	FS supportive	YES
Nano ☆BD52W02G-C			1.65	1.35											
Nano BD52W03G-C			1.98	1.62											
Nano ☆BD52W04G-C			2.75	2.25											
Nano BD52W05G-C			3.63	2.97											
Nano ☆BD52W06G-C			5.50	4.50											

☆Under Development **Nano** Mark is a product equipped with Nano Energy™ ultra-low-current technology. Click on the icon to access ROHM's product pages.
FS supportive: A product that has been developed for automotive use and is capable of supporting safety analysis with regard to the functional safety.

ROHM also offers a range of other products, including general-purpose voltage detectors, internal delay setting types, and models with watchdog timer

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