

Voltage Detectors With Delay Circuit Built-In

■ General Description

The PN809 is a cost-effective system supervisor Integrated Circuit (IC) designed to monitor VCC in digital and mixed signal systems and provide a warning signal when the system power supply is out of working range, and a reset signal to the host processor when necessary. No external components are required.

It features low supply current. Both CMOS and N-channel open drain output configurations are available. Since the delay circuit is built-in, peripherals are unnecessary and high density mounting is possible.

■ Features

- Precision VCC Monitor for 2.63V, 2.93V, 3.08V, 4.00V, 4.38V and 4.63V
- Highly Accurate: $\pm 1\%$, $\pm 2\%$

■ Ordering Information

PN809 ①②③④⑤⑥⑦

- Low Power Consumption : lower than 1.5 μ A
- Operating Voltage Range: 0.7V ~ 6.0V
- Detect Voltage Temperature Characteristics: $\pm 100\text{ppm}/^\circ\text{C}$ (TYP.)
- Built-In Delay Circuit (typ): Typical Values 50ms 100ms 200ms 400ms optional
- Output Configuration: N-channel open drain or CMOS

■ Applications

- Microprocessor reset circuitry
- Memory battery back-up circuits
- Power-on reset circuits
- Power failure detection
- System battery life and charge voltage monitors
- Delay circuitry

Designator	Description	Symbol	Description
①	Output Configuration	C	CMOS output
		N	N-ch open drain output
② ③	Detect Voltage	26	2.63V
		29	2.93V
		30	3.08V
		40	4.00V
		43	4.38V
		46	4.63V
④	Output Delay	1	70ms-150ms
		2	330ms-500ms
		4	150ms-270ms
		5	30ms-80ms
⑤	Detect Accuracy	1	Within $\pm 1.0\%$
		2	Within $\pm 2.0\%$
⑥	Package	M	SOT-23-3L
		V	SOT-23-3B
⑦	Device Orientation	R	Embossed tape, standard feed
		L	Embossed tape, reverse feed