

Press Release

S-1009 Series High Precision Voltage Detector is now officially released.

27. April 2010 - The S-1009 a new voltage detector series has just been released for production. Needing only **270nA typ.** of **supply current** it is in line with the very low power requirements of its predecessor S-1000 series and the leading product in the industry. Offering an **operating voltage** range from **0.6V to 10.0 V** it noticeably exceeds its predecessor by almost double. The **detection voltage** range is **1.2V to 4.6V** in 0.1V steps, the range from 0.8V to 2.4V is specified with $\pm 12\text{mV}$ accuracy, the range from 2.4V to 4.6 is detected with **$\pm 0.5\%$ precision**. The output signal initiated by crossing of release voltage on the rising edge of input voltage can be delayed by adding of an external capacitor. The passing of the detection voltage on the falling edge is passed without delay. This detector series is available in SC-82AB, SOT-23-5 and SNT-4A packages, all of them belong to the smallest IC packages presently used in the industry. The detector may be ordered in CMOS or N-channel-open-drain output configuration; both of them come in Active "L". The S-1009 voltage detector line is most suitable for portable equipment with a requirement for ultra low current consumption, high precision and small packages. Therefore applications in the power supply monitoring of notebooks, digital cameras, mobile phones, TVs, DVD recorder and home appliances, microcontrollers and microcomputers and in battery management, are the primary range of use. For samples, lead-time and pricing please contact your SIG office. More: http://datasheet.sii-ic.com/en/voltage_detector/S1009_E.pdf

Rev. 3.0.00

SUPER-LOW CURRENT CONSUMPTION SUPER-HIGH-ACCURACY VOLTAGE DETECTOR WITH DELAY CIRCUIT (EXTERNAL DELAY TIME SETTING) S-1009 Series

The S-1009 Series is a super high-accuracy voltage detector developed using CMOS process. The detection voltage is fixed internally with an accuracy of $\pm 0.5\%$. It operates with super low current consumption of 270 nA typ.

The release signal can be delayed by setting a capacitor externally. Delay time accuracy is $\pm 10\%$. Two output forms (high open drain and CMOS output) are available.

Compared with conventional CMOS voltage detectors, the S-1009 Series is the most suitable for the portable devices due to the superior current consumption, super high-accuracy and small packages.

■ Features

- Super low current consumption: 270 nA typ. (I_{CC} = 2.2 V, I_{DD} = 2.2 V)
- Super high-accuracy detection voltage: $\pm 0.5\%$ (V_{IN} = 2.4 V)
- Operating voltage range: 0.6 V to 10.0 V (V_{DD} = 2.4 V)
- Hysteresis characteristics: 0% (typ.)
- Delay time accuracy: $\pm 10\%$
- Detection voltage: 0.8 V to 4.6 V (0.1 V step)
- Output form: Both open drain (active "L") and CMOS output (Active "L")
- Small packages: CMOS output (Active "L") S-1009A, S-1009B; CMOS output (Active "L") S-1009C, S-1009D

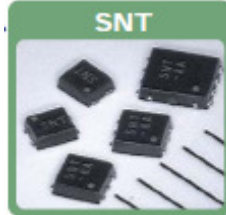
■ Applications

- Power monitor and reset for CPUs and microcomputers
- Constant voltage power monitor for TV, DVD recorder and home appliances
- Power supply monitor for portable devices such as notebook PCs, digital still cameras and mobile phones

■ Packages

Package name	Package	Ordering code	Notes
SC-82AB	SC82AB-A	MS82A-A	MS82A-A
SOT-23-5	MS203-A	MS203-A	MS203-A

Seiko Instruments Inc. 1



Contact:

Paul Krisam, Technical Sales Support Manager, Components Department
 Seiko Instruments GmbH, Siemensstraße 9, 63263 Neu-Isenburg, Germany
 Tel.: +49 6102 297 143, Fax.: +49 6102 297 50 143
 Mobile: +49 172 6396 127, eMail : Paul.Krisam@seiko-instruments.de
 Website : <http://www.seiko-instruments.de>