

## *Press Release*

### **LDO Voltage Regulator in Micro Package HSNT-4(0808)**

Up to 200mA or 75dB Ripple Rejection out of a Voltage Regulator with the Size of a Grain of Salt

Neu-Isenburg Mai 2011 – the voltage regulator Series S-1312 und S-1313, available also in HSNT-4(0808) packages of 0,8mm x 0,8mm x 0,4mm, promote Seiko Instruments Inc. a big leap in miniaturizing ICs supplying battery operated portable equipment. Although notably miniaturized these CMOS voltage regulators perform without reservation and are soldered and inspected like any other IC. Both series offer output voltages from 1.0V...3.5V in 0.05V increments with an accuracy of +/- 1.0%. The input voltage range is 1.5V...5.5V. The HSNT-4(0808) package can dissipate 335mW, the capability of the alternatively available packages SOT-23-5 is 600mW and SC-82AB 400mW (only S-1313). Appropriate shaping of the soldering pads can help to increase the power dissipation dramatically. The S-1312 and S-1313 series distinguish themselves in their current consumption, 20.0 and 0.9 microA are typical, 30.0 and 1.35 microA are maximum values. Achievable output currents are 150 and 200mA. Frequency compensation is possible using low ESR ceramic capacitors of 0.22 or 0.1microF. The S-1312 series demonstrates a ripple rejection ratio of 75dB at 1KHz and 1.2V output voltage, it is 70db at 1KHz and 2.85V. Both regulator series have internal overcurrent protection and an independent thermal shutdown circuit that engages at 150°C junction temperature and releases at 120°C. Supplying batteries may be protected by using an ON/OFF input, optionally equipped with an internal pull-down resistor. Regulators can be ordered with discharge shunts across their outputs, for discharging residual charges in the system after power down. Detailed data sheets are available from the website.

### *Contact:*

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