

コンデンサの員数、容量を削減 車載向けプライマリレギュレータ

Automotive-Grade Primary Linear Regulators Reduces Capacitance and the No. of Capacitors Required

Under Development



Nano Cap™技術搭載LDO

LDOs Utilizing ROHM's Breakthrough Nano Cap™ Technology

BD9xxN1-C series, BD9xxN5-C series

Features

■ 負荷(マイコン等)の入力コンデンサのみで動作可能

Optimized design allows operation using just the load (i.e. MCU) input capacitor

■ コンデンサ100nFで圧倒的な応答性

Provides superior response with a 100nF capacitor

■ 実装面積の削減に貢献

Contributes to a smaller mounting area

■ AEC-Q100対応(Grade1)

AEC-Q100 qualified (Grade1)

Applications

■ 車載機器

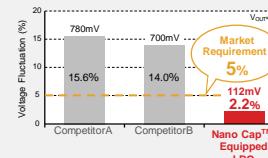
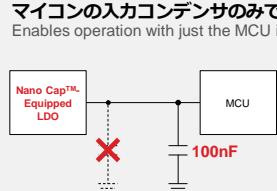
Automotive systems

■ ECUなどのマイコン用電源に最適

Power supplies for MCUs (i.e. ECUs)

低容量コンデンサで安定動作

Ensures Stable Operation with a Low Capacitance Capacitor



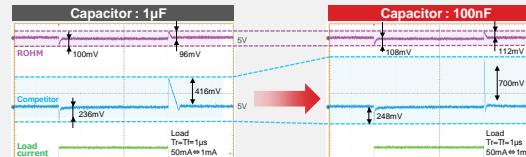
実装面積の削減にも貢献

Contributes to a Smaller Mounting Area



コンデンサ100nFで圧倒的な応答性

Provides Superior Response with Just a 100nF Capacitor



	Voltage Fluctuation (at 100nF)
Nano Cap™ LDO	△112mV (2.2% of 5V)
Conventional LDO	△700mV (14% of 5V)

コンデンサ容量が1/10で電圧変動量が少なく、安定動作を実現
Achieves stable operation with little voltage fluctuation even with 1/10th the capacitance

ラインアップ

Lineup

	★ BD9xxN1-C series	★ BD9xxN5-C series
Absolute Maximum Rating (V)	42	42
Output Voltage (V)	5.0	3.3
Output Current (mA)	150	500
Output Capacitance (nF)[Typ]	100	470
Operating Temperature (°C)	Tj=-40 to +150	Tj=-40 to +150
Package	SSOP5 / HTSOP-J8	TO252-3 / TO252-5

* Under Development

* Nano Cap™とは、ローム独自方式により容量nFオーダーでも安定制御できる技術です。

Nano Cap™ is ROHM's original technology that provides stable control even with a capacitance on the order of nF.