

High Voltage Wide Input Step-Down DC/DC Regulators

The BD9G101G and BD9G341EFJ are high-voltage, non-synchronous, step-down DC/DC converters. An integrated high-side N-channel FET with low $R_{DS(on)}$ provides efficiencies up to 90%, while features like over current and thermal shutdown protection increase reliability for industrial, point-of-load, and distributed power supply applications.

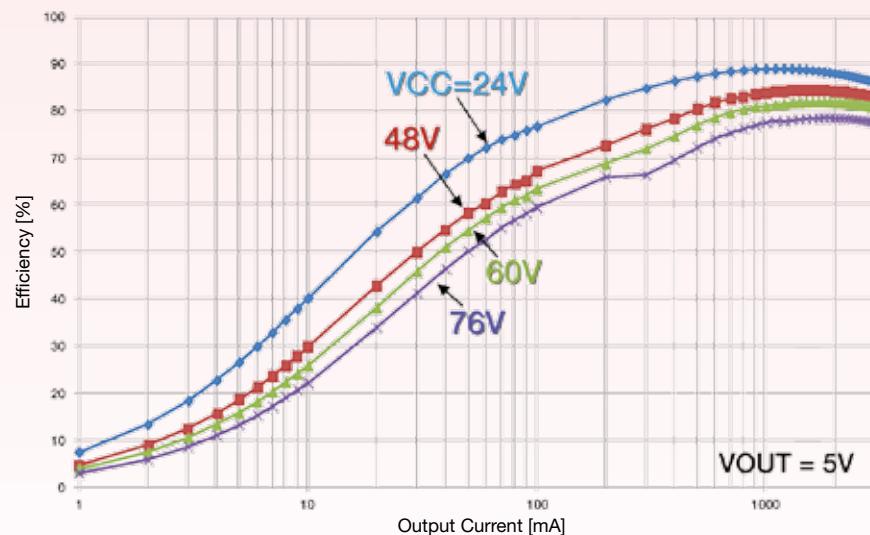
And to help engineers quickly develop and design power rails, ROHM provides proven, tested evaluation boards complete with schematics, bill of materials, and Gerber files.



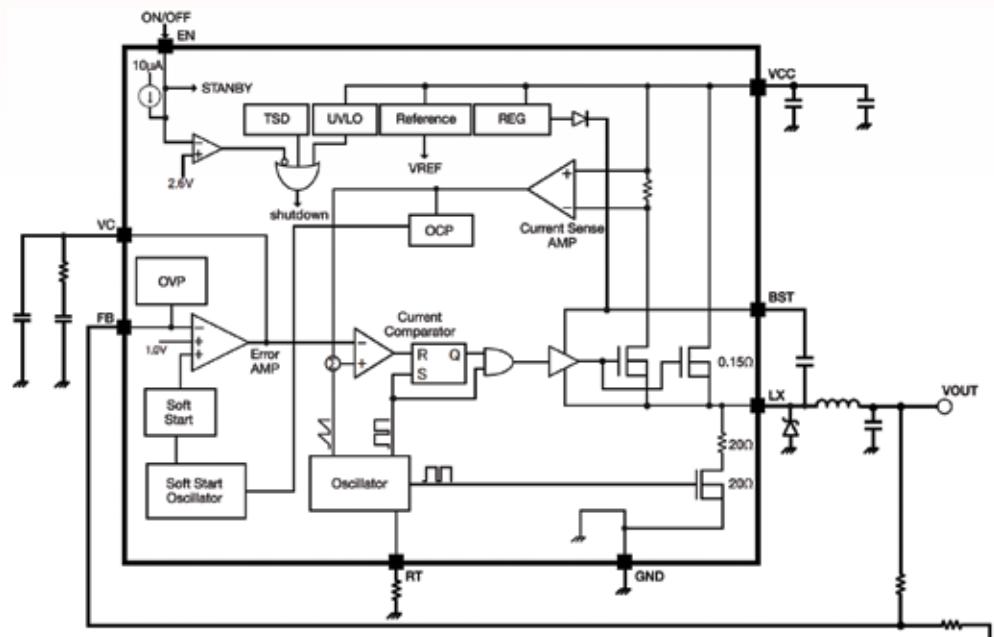
Key Features

- High Voltage Input:
 - 42V (BD9G101G)
 - 76V (BD9G341EFJ)
- Output Current:
 - 0.5A (BD9G101G)
 - 3A (BD9G341EFJ)
- Integrated High Side FET
- Up to 90% Efficiency
- High Accuracy $\pm 1.5\%$ Feedback Reference Voltage
- Enable Input Pin
- Over Current & Thermal Shutdown Protection
- Under Voltage Lockout
- Soft Start
- Over Voltage Protection (BD9G341EFJ)
- SSOP/SOT23-6 (BD9G101G) and HTSOP-J8/SOIC-8 (BD9G341EFJ) Packages

BD9G341 Output Current vs. Efficiency



BD9G341 Block Diagram



Specifications

Part No.	V_{IN}	V_{OUT}	I_{OUT}	Pin Count	Size (mm)	Evaluation Board
BD9G101G	6V~42V	Adjustable (down to 1V)	0.5A	6	2.9 x 2.8 x 1.25	Yes
BD9G341EFJ	12V~76V	Adjustable (down to 1V)	3A	8	4 x 6 x 1	~January 2014