

# 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.



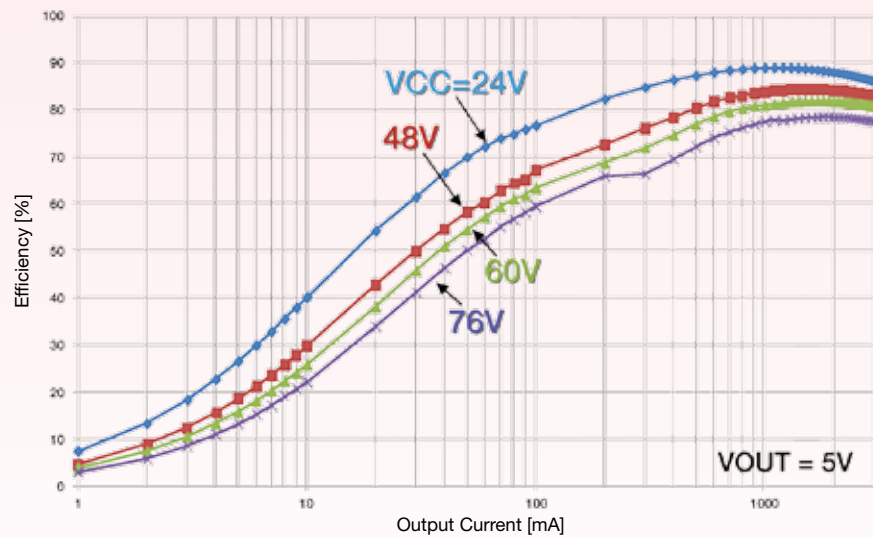
## Key Features

- 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

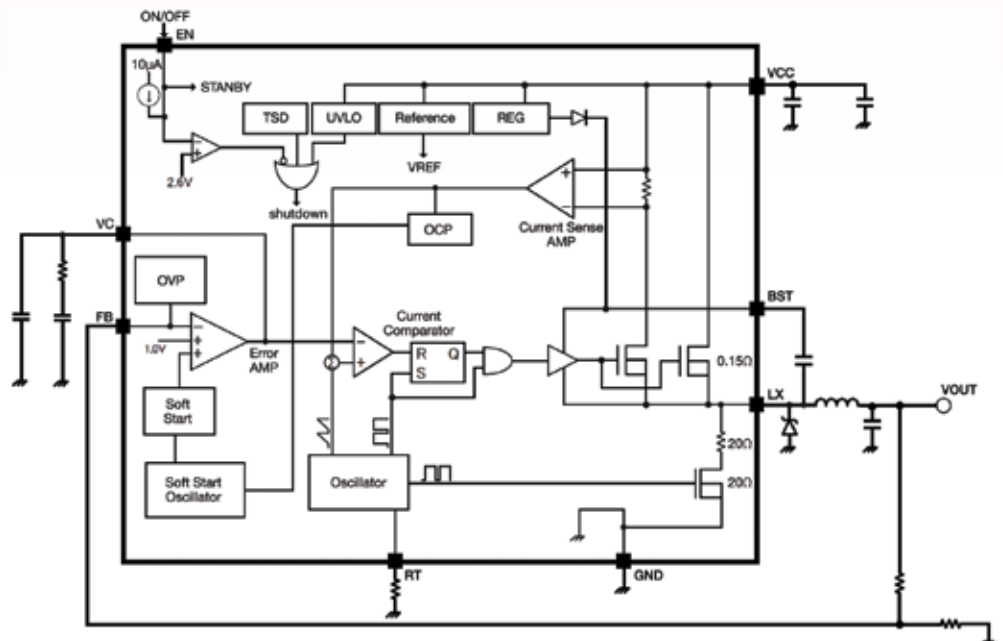
## Applications

- Industrial Process Control
- Point-of-Load and Distributed Power Designs
- Telecommunications Systems
- Automotive
- Battery Powered Equipment

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
<b>New</b> BD9G341EFJ	12V~76V	Adjustable (down to 1V)	3A	8	4 x 6 x 1	~January 2014