

# Featured Products



Contributes to greater application reliability and miniaturization

## 45V Withstand Voltage 50mA Output

## Compact Ultra-Low 6μA Quiescent Current LDO Regulators

BD7xxL05G-C series



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- **Achieves ultra-low 6μA quiescent current in a compact package**  
Lower standby power loss contributes to longer application operation
- **Strong against disturbance noise and steep input voltage fluctuations, ensuring stable output**  
Improves application reliability
- **Provides high withstand voltage and supports compact capacitors**  
Contributes to a smaller board area

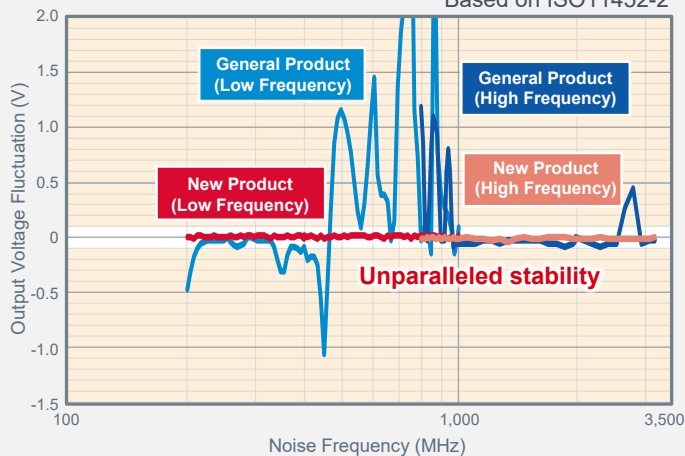


BD7xxL05G-C series  
SSOP5 Package  
(2.9 × 2.8 × 1.25mm)

### Improves Application Reliability

#### Noise Immunity Comparison vs with General Products

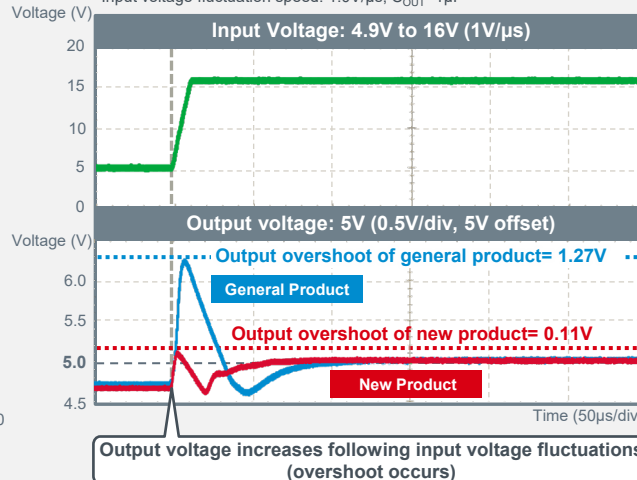
ROHM Antenna Irradiation Test Results  
Based on ISO11452-2



Extremely small output voltage fluctuations at all noise frequencies reduce resources required for noise countermeasures

#### Comparison of Input Transient Response Characteristics vs General Products

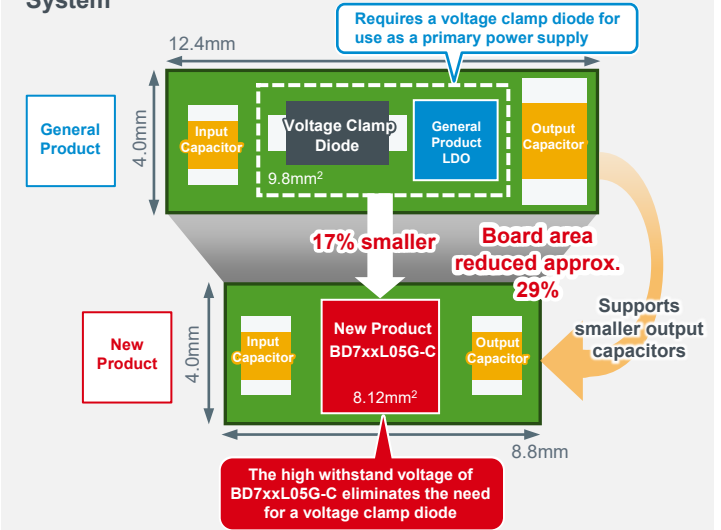
Conditions: Input voltage: 4.9V to 16V, Output current: 30mA, Ta=25°C, Input voltage fluctuation speed: 1.0V/μs, C<sub>OUT</sub>=1μF



Minimal overshoot even with steep input voltage fluctuations supports smaller output capacitors

### Contributes to a Smaller Board Area

#### Comparing Board Area in an Automotive Power Supply System



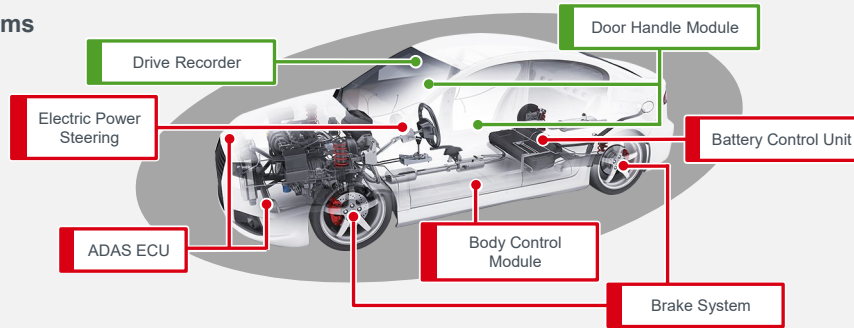
- No voltage clamp diode
  - Smaller output capacitor
- Reduces board area by 29%

## Application Examples

### Automotive Systems

Applications expected to operate when the engine is stopped

Application expected to use a backup system



**Ideal for backup system power supplies to improve functional safety**

### Consumer Devices

Sphygmomanometers, Scales etc.



### Industrial Equipment

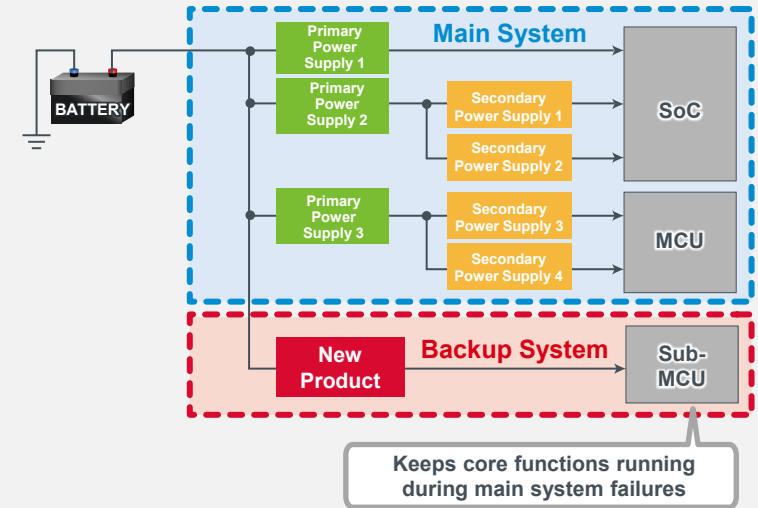
Smart Meters, Sensor Devices, etc.



**Widely applicable for devices, equipment, etc., requiring low current consumption in a compact form factor**









## Sample Application Circuit

### Configuration Example of an Automotive Power Supply System





**Enables configuration of space-saving, low consumption backup systems**

## 45V Withstand Voltage 50mA Output BD7xxL05G series

Part No.	Input Voltage (V)	Output Voltage (V)	Output Current (Max) (mA)	Output Voltage Precision (%)	Quiescent Current (Typ) (μA)	Output Capacitance (μF)	Operating Temperature T <sub>J</sub> (°C)	Package	ComfySIL™ Functional Safety Category	Automotive Grade AEC-Q100
<b>New</b> BD725L05G-C  	3.5 to 42.0	2.5	50	±2	6	0.5 to 1,000	-40 to 150	SSOP5	FS supportive*	YES
<b>New</b> BD730L05G-C  	3.5 to 42.0	3.0								
<b>New</b> BD733L05G-C  	3.8 to 42.0	3.3								
<b>New</b> BD750L05G-C  	5.6 to 42.0	5.0								

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\* FS Supported: ICs developed for automotive use that can support safety analysis related to functional safety. Click on the  icon to access the product datasheet and the  icon to view the datasheet on ROHM's website.

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