



# New Product Announcement

## AP7369Q

### Ultra-Low Quiescent, 45V Input Voltage, 150mA Automotive-Compliant LDO Regulator

The AP7369Q is an ultra-low quiescent, 45V input voltage, 150mA automotive compliant\* LDO regulator.

The device has a wide 3V to 45V input voltage range with an extremely low 2.1 $\mu$ A quiescent current, making it a good choice in automotive battery-connected applications where standby current consumption is of utmost importance.

One key application that benefits from the AP7369Q's ultra-low quiescent current is an ultra-wideband (UWB) sensor in a digital key system, which operates even when the vehicle is turned off.

The device has a maximum 150mA output current and is available in 2.5V, 3.3V, and 5V fixed output voltage versions with  $\pm 2\%$  output tolerance. It also features integrated short-circuit and thermal-shutdown protection.

This device is available in the SOT25 and SOT223 packages.



#### The DIODES Advantage

The AP7369Q, with its ultra-low quiescent current, minimizes power consumption for always-on systems in automotive battery-connected applications.

- **Wide 3V to 45V Input Voltage Range**  
Allows the device to withstand transients in automotive systems
- **Ultra-Low 2.1 $\mu$ A Quiescent Current**  
Extends battery run time to enable continued operation when the vehicle is turned off
- **High PSRR up to 85dB @ 1kHz**  
Suitable for noise-sensitive applications
- **Automotive-Compliant, AEC-Q100 Grade 1**  
Operates across -40°C to +125°C ambient temperature and supports PPAP documentation

Automotive-compliant - AEC qualified, manufactured in IATF 16949 certified sites supporting PPAP documents.

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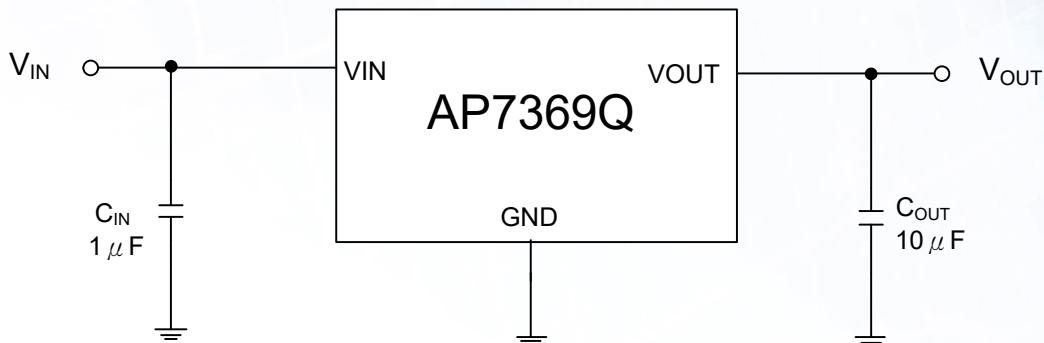
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#### Applications

- Powering MCUs and CAN/LIN transceivers
- Keyless entry systems
- EV and HEV battery management systems
- Automotive head units
- Body control modules
- Transmission control units (TCUs)

### Typical Application



### Automotive-Compliant CMOS LDO Product Portfolio

Part Number	V <sub>IN</sub>	V <sub>OUT</sub>	I <sub>OUT</sub>	V <sub>DROP @ Full Load</sub>	I <sub>Q</sub>	Output Accuracy	Enable	Output Discharge	PSRR @1kHz	Package
	V	V	mA	mV	μA					
<a href="#">AP7369Q</a>	3.0 to 45	2.5, 3.3, 5.0	150	1000	2.1	2	No	No	85	SOT25, SOT223
<a href="#">AP7343Q</a>	1.7 to 5.25	0.9, 1.0, 1.1, 1.2, 1.5, 1.8, 1.85, 2.5, 2.7, 2.8, 2.9, 3.0, 3.3	300	310	35	1	Yes	No	75	SOT25
<a href="#">AP7343DQ</a>								Yes		
<a href="#">AP7347DQ</a>	1.7 to 5.5	1.0, 1.05, 1.1, 1.15, 1.2, 1.5, 1.7, 1.8, 2.2, 2.5, 2.8, 2.9, 3.3, 5.0	500	320	60	1	Yes	Yes	75	SOT25, U-DFN2020-6/SWP
<a href="#">AP7347EQ</a>	1.7 to 5.5	Adj 1-5V	500	320	75	1	Yes	Yes	75	U-DFN2020-6/SWP, V-DFN3030-8/SWP
<a href="#">AP7375Q</a>	3.0 to 45	1.8, 3.0, 3.3, 5.0	300	1200	2.1	2	Yes	No	85	SOT25, U-DFN2020-6/SWP, SOT89, SO-8EP

### Ordering Information

Orderable Part Number	V <sub>OUT</sub> (V)	Compliance (Only Automotive Supports PPAP)	Package	Moisture Sensitivity	Packing	
					Quantity	Carrier
<a href="#">AP7369Q-xxW5-7</a>	25 : 2.5V 33 : 3.3V 50 : 5.0V	Automotive	SOT25	MSL-1	3,000	7" Tape & Reel
<a href="#">AP7369Q-xxE-13</a>			SOT223	MSL-1	2,500	13" Tape & Reel