

New Product Announcement

AP3927D

Low Standby Power, High-Voltage, Non-Isolated Buck Power Switcher for Appliances and IoT

The AP3927D is a universal AC, highvoltage input, non-isolated, offline switcher specially designed for applications with a maximum of 360mA of output current or up to 6W of output power.

The device provides a simple power supply solution for smart home appliances, home automation, industrial control, and IoT power applications.

Supporting both non-isolated buck or offline flyback topology solutions, the product has several differentiating advantages:

- Low standby power
- High light-load efficiency
- Cost-saving BOM
- Rich protection functions to ensure reliable operation

The AP3927D is available in the SO-7 (Type B) package that supports HV creepage requirements.

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The DIODES Advantage

This high-voltage, non-isolated buck power switcher provides a reliable solution for appliances and IoT devices.

- Low System BOM Cost Non-isolated buck configuration removes expensive components
- Low Standby Power (<20mW)</p> Meets latest standby power requirements
- **High Light-Load Efficiency** Caters to IoT devices and other equipment that spend large periods of time sleeping
- Rich Protection Features: Overtemperature, Over-Load, and Short-Circuit Protection Ensures robust and reliable operation
- Industry-Standard Footprint-Compatible SO-7 Switcher Provides a cost-effective alternative to existing non-isolated buck solutions

Applications

Non-Isolated Standby and Auxiliary power rails in

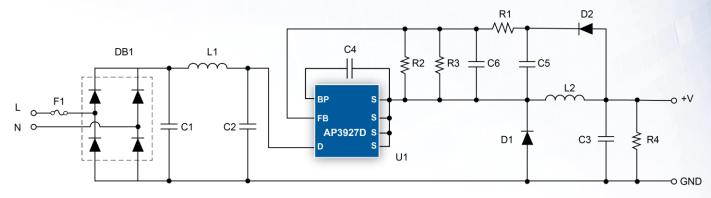
- Smart home appliances Home automation
- Industrial controls
- IoT power



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Typical Application



Non-Isolated Buck Product Portfolio

Part Number	UVLO Threshold V	$\frac{Max. R_{DS(ON)}}{(T_A = 25^{\circ}C)}$	BV _{DSS}	Peak Current mA	Standby Power mW	Output Power Rating W	Package
AP3927D	3.5	10.5	700	650	< 20	6	SO-7 (Type B)
<u>AP3928</u>	7.9	6.5	700	1100	< 30	10	SO-8
<u>AP3917B</u>	6.5	16	650	280	< 30	2	SO-7
<u>AP3917C</u>	6.5	16	650	420	< 30	3	SO-7

Ordering Information

Orderable Part	Compliance (Only Automotive	Package	Moisture	Packing	
Number	Supports PPAP)	Fachage	Sensitivity	Quantity	Carrier
AP3927DS7-13	Standard	SO-7 (Type B)	MSL-3	4,000	13" Tape & Reel