



New Product Announcement

AP21x1A (x=4 to 9)

0.5A~1.5A Single Channel Current Limit Power Switch

The AP21x1A series of integrated high-side power switches are optimized for USB and other hot-swap applications.

AP21x1A series complies with USB 2.0 and is available with both polarities of enable input.

Current and thermal limiting and short circuit protection as well as controlled rise time and undervoltage lockout functionality improves the robustness of USB ports.

A 7ms deglitch capability on the open-drain Flag output prevents false overcurrent reporting and does not require any external components.



The Diodes' Advantage

The AP21x1A Provides a Fast and Accurate Overcurrent Protection for Improved USB Port Protection

- **Reverse Current Blocking, UVLO, Overcurrent/Temperature and Short-Circuit Protection**
Improves robustness of USB ports
- **Dual-Purpose Port Applications**
AP21x1A is suitable for use in dual-purpose port applications in which a single port is used for data communication between the host and peripheral devices while simultaneously maintaining a charge to the battery of the peripheral device

Applications

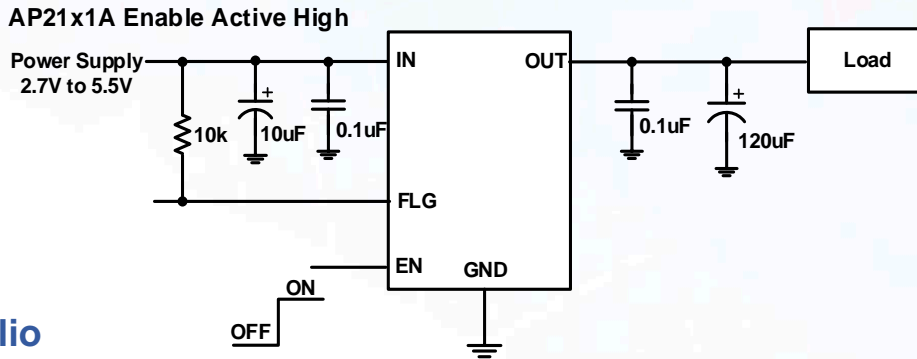
- Tablets
- Set Top Boxes
- Computing
- Networking
- Ultrabooks
- SSDs
- Consumer Electronics



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Typical Application Schematic



Product Portfolio

Diodes P/N	Enable Polarity	V _{in}	Max Output Current (A)	Typ Current Limit (A)	Output Discharge Function	UL and Nemko IEC 60950-1 Certified	Package
AP2141A	Active low	2.7-5.5V	0.5	0.8	No	Yes	SO-8 MSOP-8-EP SOT25 DFN2018-6
AP2151A	Active high				No	Yes	
AP2161A	Active low	2.7-5.5V	1.0	1.5	No	Yes	
AP2171A	Active high				No	Yes	
AP2181A	Active low	2.7-5.5V	1.5	2.1	No	Yes	
AP2191A	Active high				No	Yes	

Ordering Information

Device	Package Code	Packaging	Package Marking Information	Reel Size	Tape Width	Quantity
AP21x1AW-7 (x= 4 to 9)	W	SOT25	WA YWX	7"	8 mm	3,000
AP21x1AS-13 (x= 4 to 9)	S	SO8	WA YWX	13"	12 mm	2,500
AP21x1AMP-13 (x= 4 to 9)	MP	MSOP8-EP	WA YWX	13"	12 mm	2,500
AP21x1AFM-7 (x= 4 to 9)	FM	U-DFN2018-6	WA YWX	7"	8 mm	3,000