



New Product Announcement

AP22815
AP22615

Adjustable Single Channel Power Distribution Switch with Output OVP

The AP22815/615 is a 3A single channel current-limited high-side power switch with output OVP optimized for USB and other hot-swap applications which need to have over voltage protection from output to protect the system.

The AP22815 supports fixed current-limit feature, while AP22615 has an adjustable current-limit feature optimized for applications that require precision current limiting support. It supports USB PD3.0 fast role swap function. The output voltage recovers to USB valid voltage range within 110 μ s during USB PD fast role swap event.

The device has fast short-circuit and output over-voltage response time for improved overall system robustness

Both TSOT25 and TSOT26 packages integrate discharge circuitry on the OUT pin. They provide a complete protection solution for applications subject to heavy capacitive loads and the prospect of short circuit. They also offer output over-voltage protection, reverse current blocking, over-current, over-temperature and short-circuit protection, as well as controlled rise time and under-voltage lockout functionality.



The Diodes Advantage

- **Low $R_{DS(ON)}$ of 40m Ω**
Decreases voltage drops and power losses
- **Soft Start Time & Fault Indicate**
 - Built-in soft-start with 2.1ms typical rise time
 - Fault report (FLG) with blanking time (7ms typ.)
- **Wide Ranging Protection Feature Set**
 - Over-Voltage with Auto Recovery
 - Over-Current with Auto Recovery
 - Short-Circuit with Auto Recovery
 - Over temperature with Auto Recovery
 - Output Reverse Voltage Protection
- **Fixed 3.0A /Accurate Adjustable Current Limit**
 - AP22615 Programmable Current Range: 0.4A~4.0A
 - AP22815 Current range: 3.0A
- **Industry Standard Packages**
 - TSOT26 for AP22615
 - TSOT25 for AP22815

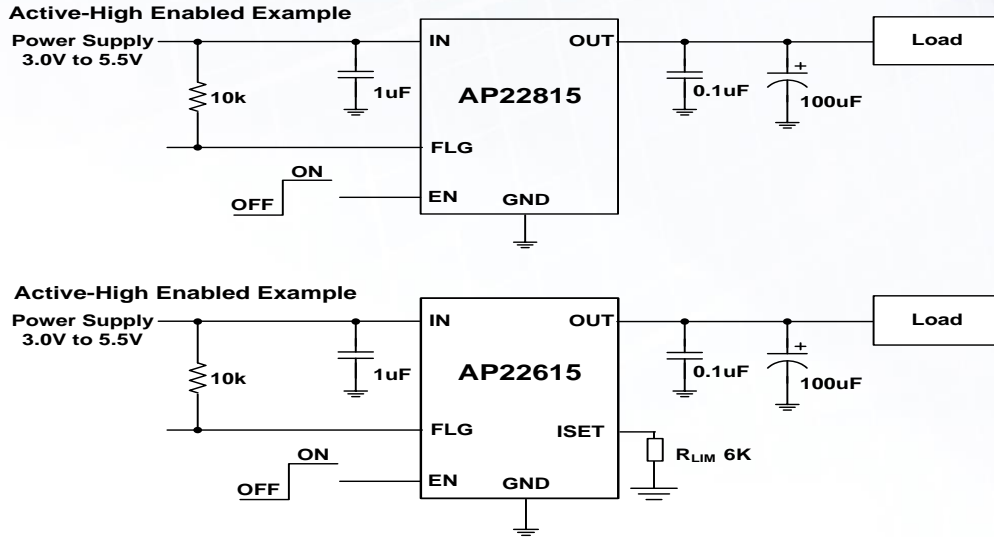
Applications

- Notebook PCs
- Tablet PCs
- Motherboards
- Set-Top-Boxes
- USB Charger
- Telecom Systems



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Product Portfolio

Part Number	Maximum Continuous Output Current	Maximum Current Limit	Enable Logic (Active)	Minimum Operating Voltage	Maximum Operating Voltage	Quiescent Current @ VIN = 5.0V	R _{DS(on)} mΩ	Output Discharge	OCP Output Latch Off	OCP Flag	Reverse Current Protection	UL Listed, File Number E322375	IEC 60950-1 GB Scheme Certified	Package Outlines	7"/13" Tape and Reel	
															Quantity/reel	Reel size Suffix
AP22815AWT5-7	3.0	4.2	High	3.0	5.5	300	40	Y	N	Y	Y	Y	Y	TSOT25	3,000	-7
AP22615AWU5-7	3.0	4.2	High	3.0	5.5	300	40	Y	N	Y	Y	Y	Y	TSOT26	3,000	-7

Ordering Information

Device	Package Code	Packaging	Package marking info.	Reel Size	Tape Width	Quantity
AP22815AWT-7	WT	TSOT25	XX Y W X	7"	8mm	3,000
AP22615AWU-7	WU	TSOT26	XX Y W X	7"	8mm	3,000

To find out more information:

AP22615: <https://www.diodes.com/part/AP22615.pdf>

AP22815: <http://www.diodes.com/partA/P22815.pdf>