



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





New Product Announcement

AP2145/2155

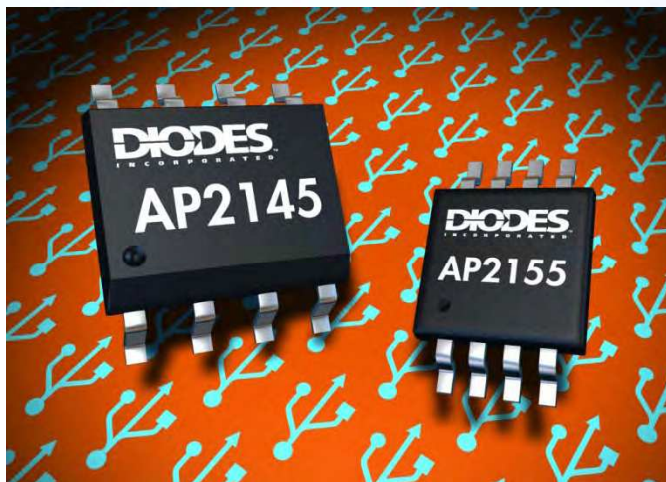
Single Channel Current-Limiting Power Switch with Reverse Current Blocking

Description

The AP2145 and AP2155 are 0.5A single channel cost effective form-fit-function integrated high-side power switches, optimized for Universal Serial Bus (USB) ports protection and other 3V-5V hot-swap applications. The family of devices complies with USB standards, and available with both polarities of Enable input.

They offer reverse current blocking and over-current, over-temperature and short circuit protection, as well as controlled rise time and under-voltage lockout. A 7ms deglitch capability on the open-drain Flag output prevents false over-current reporting and does not require any external components.

They are available in industry standard in SO-8 and MSOP-8L-EP green packages.



The Diodes advantage

The AP2145/AP2155 provide the simplest cost effective solution for USB ports protection

- **Form-fit-function industry standard in SO-8 and MSOP-8L-EP**
Lower cost single channel complementing existing dual channel AP21x6 series (0.5A/1A/1.5A)
- **10µs fast transient response time**
Prevent unnecessary system shutdown or restart and improve system robustness
- **Tight current limiting tolerance**
Reduce power requirements on system rail and reduce cost
- **Reverse current blocking, over-current, short-circuit and over-temperature protection**
Improve robustness of USB port
- **UL Recognized (pending) and IEC 60950-1 CB Scheme Certified**
Ensure public safety and improve product quality

Circuit functions

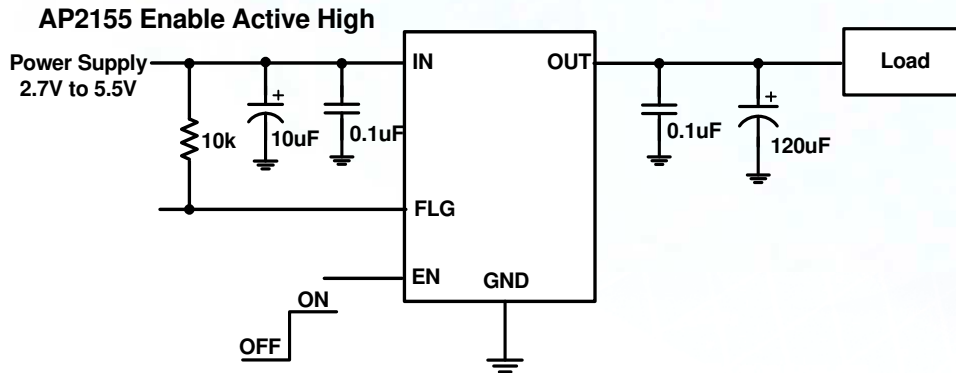
- USB ports protection
- Short-circuit protection
- Heavy capacitive loads protection



New Product Announcement

AP2145/2155

Single Channel Current-Limiting Power Switch with Reverse Current Blocking



Product portfolio

Diodes P/N	Channel	Enable Polarity	V _{in}	Max Output Current (A)	Typ Current Limit (A)	Reverse Current Blocking	UL and Nemko IEC 60950-1 Certified	Package
AP2145	1	Active low	2.7-5.5V	0.5	0.8	Yes	Yes	SO-8 MSOP-8L-EP
AP2155		Active high				Yes	Yes	
AP2146	2	Active low	2.7-5.5V	0.5	0.8	Yes	Yes	
AP2156		Active high				Yes	Yes	
AP2166		Active low	2.7-5.5V	1.0	1.5	Yes	Yes	
AP2176		Active high				Yes	Yes	
AP2186		Active low	2.7-5.5V	1.5	2.1	Yes	Yes	
AP2196		Active high				Yes	Yes	

Product page <http://www.diodes.com/products/catalog/list.php?parent-id=71>

Datasheet http://www.diodes.com/datasheets/AP2145_2155.pdf

Ordering information

Device	Packaging	Package marking info	Reel size	Tape width	Quantity
AP2145SG-13	SO-8	AP2145 YYWWXX	13"	12mm	2500
AP2155SG-13	SO-8	AP2155 YYWWXX	13"	12mm	2500
AP2145MPG-13	MSOP-8L-EP	YWXE AP2145	13"	12mm	2500
AP2155MPG-13	MSOP-8L-EP	YWXE AP2155	13"	12mm	2500

All variants are in packages that are "Green" Molding Compound (No Br, Sb) with Lead Free Finish/RoHS Compliant (Note 1)

Notes: 1. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Notes

2. Codes for date coding on part marks

Y Year 0~9 YY Year 08, 09 etc W A~Z week 1~26 a~z week 27~53 WW Week 01~52 X A~Z: Green