**Announcement**

**New Product**

**AP2145/2155**

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**Single Channel Current-Limiting Power Switch with Reverse Current Blocking**

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**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.

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**The Diodes advantage**

The AP2145/2155 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

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**Circuit functions**

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

New Product

AP2145/2155

Single Channel Current-Limiting Power Switch with Reverse Current Blocking

AP2155 Enable Active High

IN

Out

Load

FLG

EN

GND

Power Supply
2.7V to 5.5V

0.1uF

10k

10uF

0.1uF

120uF

Product portfolio

<table>
<thead>
<tr>
<th>Diodes P/N</th>
<th>Channel</th>
<th>Enable Polarity</th>
<th>Vin</th>
<th>Max Output Current (A)</th>
<th>Typ Current Limit (A)</th>
<th>Reverse Current Blocking</th>
<th>UL and Nemko IEC 60950-1 Certified</th>
<th>Package</th>
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Datasheet http://www.diodes.com/datasheets/AP2145_2155.pdf

Ordering information

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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

www.diodes.com