28V, Over-Voltage Protection Load Switch with Adjustable Current-Limit Control

1. General Description

The FA7626 is a low $R_{DS(ON)}$, 3A low loss power distribution switch with high output absolute rating of 28V. The programmable current limit to protect the power source from over current or short circuit conditions. The power switch is controlled by an on/off input (EN/ENb), which is capable of interfacing directly with low-voltage control signals.

The FA7626 also supports Fast Role Swap as defined in the USB Power Delivery 3.0 specification. The FLAGb pin is an open drain output that asserts (active low) when over-current or over-voltage or over-temperature event. The FLAGb signal remains asserted until the fault condition is removed and the device resumes normal operation. The FA7626 is designed to eliminate false fault reporting by using an internal deglitch circuit.

Features

- Typical 35mΩ On Resistance
- 28V Absolute Ratings at VOUT
- Input Voltage: 2.5V to 5.5V
- Fast Role Swap (FRS) Detection
- Fixed or Programming Current Limit Threshold
- Support both Active-High Enable EN and Active-Low Enable ENb
- Output Discharge when Switch Disabled
- True Reverse Current Blocking when Switch ON or OFF
- 5.8V Output Over Voltage Protection
- Output Reverse Current Protection
- Over Temperature Protection
- Fault Flag Output for Over Current, Over Voltage, or Over Temperature Conditions
- UL Listed File No. E501281 and CB certified

Ordering Information

P/N	Package	Enable	Fast Discharge	Current Limit	Top Side Marking
FA7626AA6R	TSOT-23-6L	Active High	YES	Adjusted	7626A YWZZ
FA7626BA6R	TSOT-23-6L	Active Low	YES	Adjusted	7626B YWZZ
FA7626CA6R	TSOT-23-6L	Active High	NO	Adjusted	7626C YWZZ
FA7626DA6R	TSOT-23-6L	Active Low	NO	Adjusted	7626D YWZZ
FA7626EA5R	TSOT-23-5L	Active High	YES	Fixed	7626E YWZZ
FA7626FA5R	TSOT-23-5L	Active Low	YES	Fixed	7626F YWZZ
FA7626GA5R	TSOT-23-5L	Active High	NO	Fixed	7626G YWZZ
FA7626HA5R	TSOT-23-5L	Active Low	NO	Fixed	7626H YWZZ

※Topside Marking Rule:

Y：Year 2019→F、2020→G。

W：Week 01~26→A~Z、27~52→a~z、53→0。

ZZ：Series Code。