

### 5A Slew Rate Controlled Load Switch with Reverse Blocking

#### Features

- Operating Range: 1.5V–5.5V
- Low  $R_{DS(ON)}$  MOSFET: Typ. 13.4m $\Omega$  @ 3.3V
- Continuous DC current up to 5A
- Built-in slew rate controlled turn-on: 2.7ms
- Low quiescent current < 1 $\mu$ A
- ESD Protection
  - ▶ Human Body Model : 8kV
  - ▶ Charged Device Model : 2.0kV
  - ▶ Compliance to IEC61000-4-2 Level 4
    - Contact Discharge : 8kV
    - Air Discharge : 15kV
- Output Auto Discharge when Disabled option (-1)
- Pb-Free Packages:
  - ▶ WLCSP-6, 1.0 x 1.5mm
  - ▶ RoHS and Green Compliant
- -40°C to +85°C Temperature Range

#### Applications

- Mobile Phones & Tablets
- SSD (Solid State Drive)
- Portable Instruments
- DSC, DVR, GPS

#### Brief Description

The KTS1605 is slew rate controlled load switch designed for 1.5V to 5.5V operation. It features a controlled soft-on slew rate of typical 2.7ms that limits the inrush current for designs with heavy capacitive loads and thereby minimizing any resulting voltage drop at the power rails.

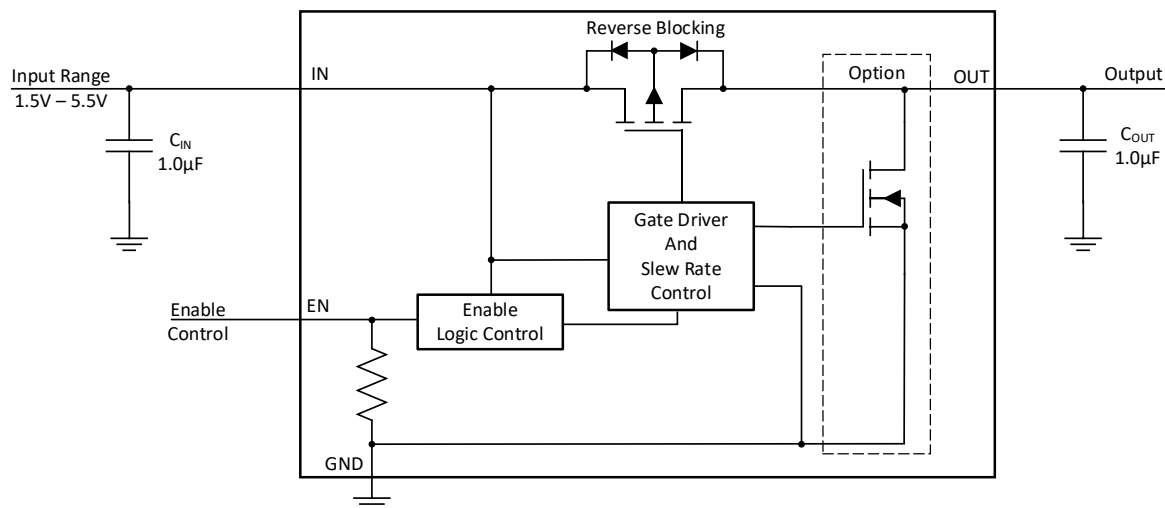
The very low  $R_{DS(ON)}$  allows currents up to 5A, whilst minimizing the power dissipation and voltage drop from supply to load. The KTS1605 features an active high enable pin, which is capable of interfacing directly with low input control signals, without any additional level shifting circuitry. The KTS1605 also includes an active pull-down to ensure the device remains off, should the enable be allowed to float.

The KTS1605 provides reverse blocking in the OFF state to ensure that power supplies are not discharged.

In addition, the KTS1605 has an option for output auto discharge feature. This enables the device to quickly discharge the output when the device is disabled.

The KTS1605 is available in an optimized, lead-free, RoHS and Green compliant, small 6-pin WLCSP 1.0 x 1.5mm package with 0.5mm pitch

#### Typical Application



**Ordering Information**

Part Number	Marking <sup>1</sup>	Operating Temperature	Auto-Discharge	Package
KTS1605EUB-TR	JCXXYYZZZZ	-40°C to +85°C	NO	WLCSP-6 1.0 x 1.5 x 0.620mm
KTS1605EUB-1-TR	JLXXYYZZZZ		YES	

1. XX = Date Code, YY = Assembly Code, ZZZZ = Serial Number.

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