

## Very Ultra-Low On-Resistance Load Switch

### Features

- Integrated Single Channel Load Switch
- Input Voltage Range: 0.8V to 5.5V
- Ultra-low ON-Resistance
  - M5938A = 5.5 mΩ
  - M5938B = 11 mΩ
  - M5938C = 22 mΩ
- Continuous Switch Current
  - M5938A = 10A
  - M5938B = 6A
  - M5938C = 4A
- Low Threshold Control Inputs
- Adjustable Slew-rate Control
- Output Discharge Path
- 8-pin TDFN, MSOP & 6-pin SOT Package

### General Description

The M5938A/B/C is a N-channel MOSFET power switch designed for high-side load-switching applications, and the device has a typical  $R_{DS(ON)}$  of 5.5mΩ / 11mΩ / 22mΩ and the output current is limited to 10A / 6A / 4A.

In the M5938A/B/C, a discharge path is added for quick output discharge when the switch is turned off. The rise time of the device is internally controlled in order to avoid in-rush current and can be adjusted using a ceramic capacitor on the GATE pin.

The M5938A/B/C is available in TDFN3X3-8, MSOP-8 (FD) and SOT-23-6 package.

### Applications

- Notebooks / Netbooks
- Industrial Systems
- Telecom Systems

### Ordering Information

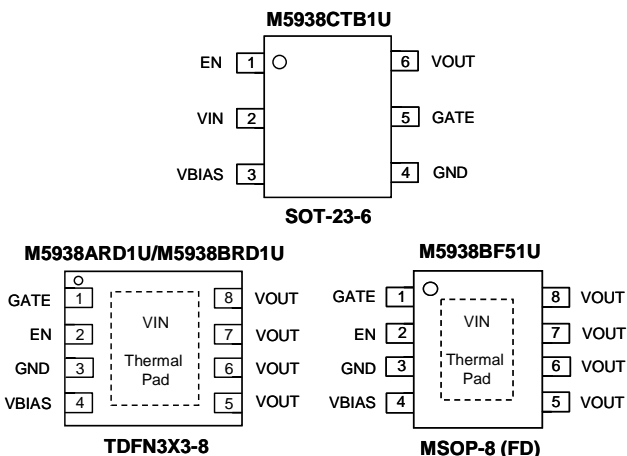
ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
M5938ARD1U	5938A	-40°C to 85°C	TDFN3X3-8
M5938BRD1U	5938B	-40°C to 85°C	TDFN3X3-8
M5938BF51U	5938B	-40°C to 85°C	MSOP-8 (FD)
M5938CTB1U	598Cx	-40°C to 85°C	SOT-23-6

Note: RD: TDFN3X3-8    F5: MSOP-8 (FD)    TB: SOT-23-6

1: Bonding Code

U: Tape & Reel

### Pin Configuration



### Typical Application Circuit

