

Low-input-voltage 5A Current-limited Load Switch

DESCRIPTION

The MT7621 is a compact, low R_{ON} load switch with controlled slew rate. With V_{BIAS} supply from 2.5V to 5.5V, the device operates over an input voltage range of 0.3V to 2.0V and can support maximum continuous current of 5A.

The controlled output slew rate greatly reduces inrush current at start-up when charging large bulk load capacitances, thereby minimizes input supply voltage droop. MT7621 comes with built-in full protections against over current and over temperature. MT7621 has built-in 12 Ω resistor for quick output discharge at disable. MT7621 is available in small DFN 1.5 x 1.5_6L packages.

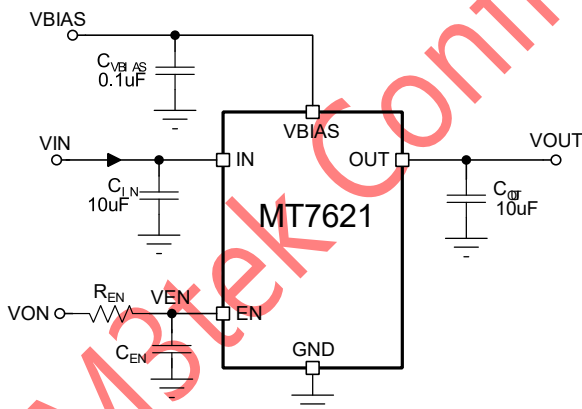
FEATURES

- Input Range from 0.3V to 2.0V
- Bias Range: 2.5V to 5.5V ($V_{BIAS} \geq V_{IN} + 1.3V$)
- Low R_{ON} 12m Ω Internal Pass Switch
- 5A Continuous output current
- Low quiescent current 40uA
- Accurate turn on threshold to allow programmable turn on delay to enable power sequencing
- Built-in Over-Current and Over Temperature Fault Protections
- Internal 12 Ω Quick Output Discharge in Shutdown
- Reverse blocking in shutdown
- Small DFN 1.5 x 1.5_6L package

APPLICATIONS

- Solid-state Drives
- Wearable IOT Devices
- Portable Medical Equipment
- Portable Media Players
- Smartphones and Tablets

TYPICAL APPLICATIONS

 R_{ON} vs. Input Voltage