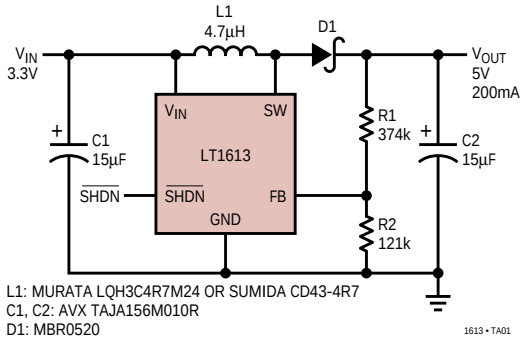
1.4MHz, Single Cell DC/DC Converter in 5-Lead SOT-23 Package

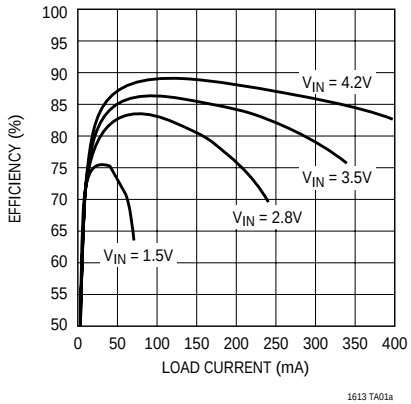
The LT1613 is the industry's first 5-lead SOT-23 current mode DC/DC converter. Intended for small, low power applications, it operates from an input voltage as low as 1V and switches at 1.4MHz, allowing the use of tiny, low cost capacitors and inductors 2mm or less in height. Its small size and high switching frequency enables the complete DC/DC converter function to take up less than 0.2 spare inches of PC board area. Multiple output power supplies can now use a separate regulator for each output voltage, replacing cumbersome quasi-regulated approaches using a single regulator and a custom transformer.

A constant frequency, internally compensated current mode PWM architecture results in low, predictable output noise that is easy to filter. The high voltage switch on the LT1613 is rated at 36V, making the device ideal for boost converters up to 34V as well as for Single-Ended Primary Inductance Converter (SEPIC) and flyback designs. The device can generate 5V at up to 200mA from a 3.3V supply or 6V at 200mA from four alkaline cells in a SEPIC design. The LT1613 is available in the 5-lead SOT-23 package.

3.3V to 5V 200mA DC/DC Converter



L1: MURATA LQH3C4R7M24 OR SUMIDA CD43-4R7
C1, C2: AVX TAJA156M010R
D1: MBR0520



Source: LT1613 Data Sheet
www.linear-tech.com/portable.html