

Re: Low efficiency from SEPIC converter

Source: <http://sci.tech-archive.net/Archive/sci.electronics.design/2004-08/2709.html>

From: Pooh Bear (*rabbitsfriendsandrelations_at_hotmail.com*)

Date: 08/16/04

Date: Mon, 16 Aug 2004 21:02:39 +0100

Liam wrote:

- > *Hi*
- > *My company has had a long standing design based on the LT1371 in a*
- > *SEPIC configuration. Its worked fine in that application but we had a*
- > *bit of shock when we found its efficiency is only 55%.*
- > *Our new application requires as high a figure as possible.*
- >
- > *The circuit used is the one in the data sheet. One possible problem is*
- > *that our application normally draws 80mA (55 % efficient) but*
- > *occasionally requires a pulse of 0.5A.*
- >
- > *The components are as shown on the circuit except for the diode which*
- > *is a MBR340T3 and C2 which is an AVX TPS series (could'nt get hold*
- > *the specified one).*
- >
- > *Does anyone have any idea where we've gone wrong. The linear tech*
- > *switchercad software reckons we should get 85% efficiency.*

I've had disappointing efficiency from an LT switcher device many yrs back too.

I would suspect indifferent inductor performance as something worth investigating initially.

Graham