

MC34063A development aid

This is a simple-minded design tool that allows you to calculate component values MC34063A simple switcher chip. It displays the appropriate schematic diagram (step-up, step-down, or inverting) and checks for current and voltage limits. Feedback resistors are chosen from standard component values so that the output is as close to desired value as possible.

I created it as experiment to learn about client-side JavaScript programming and about how it interacts with input forms. Hopefully it proves useful for somebody. Typical input capacitor value is about 100uH, all electrolytics need to be low ESR types. The fast schottky diode should be sufficient for a current needed, 1N5818, 1N5819, 1N5820 and alike will do just fine.

Vin	10	V
Vout	14	V
Iout	500	mA
Vripple	100	mV(pp)
Fmin	20	kHz
<input type="button" value="Calculate"/>		

Ct=657 pF
 Ipk=1489 mA
 Rsc=0.201 Ohm
 Lmin=99 uH
 Co=739 uF
 R=180 Ohm
 R1=1k R2=10k (13.75V)

