Core Loss Calculator

Part Number:

Please Enter Inductor Data OR Wave Form Data

ENTER WAVEFORM DETAILS

Current RMS (Irms) A:

Ripple Current (ΔI) A:

Frequency (kHz):

Req Inductance (uH):

Inductor current RMS (Irms) A:

Frequency (kHz):

Voltage input (Vin) V:

Voltage output (Vo) V:

Output current Max (Io) A:

Ripple voltage (Vripple) mV:

Voltage drop at switch (Vsw) V: 1.5

Voltage drop Diode (forward voltage drop) (Vd) V:0.5

Assumption:

- Approximate Calculation for Buck converter.
- For the loop stability reason – output capacitor should have resistance of > 100 mOhms.
- No LC post filter

Result

Winding Loss: (W)

Core Loss DC: (W)

Core Loss AC: (W)

Req Inductance: (uH)

Peak Current: (A)