

- When I change the input voltage to 127, I am losing the Resonant turn on (Valley switching) in TINA simulation. Why this is happening?
- In simulation model, at 127v input the Fet is turning on before even Qr pin reach 0.3v
- In T.T's original simulation file the value of c8 is 20p. Shouldn't this be 320p, since ideal elements are used?
- Is the lower frequency (at 127v) calculation wrong in the example in datasheet?

$$Freq_{127} := \frac{1}{\left(I_{pk} \cdot L_p \cdot \left(\frac{1}{V_{dmin}} + \frac{1}{((V_{out} + V_f) \cdot N_{ps})} \right) \right) + T_d}$$

$$Freq_{325} := \frac{1}{\left(I_{pk} \cdot L_p \cdot \left(\frac{1}{V_{dmax}} + \frac{1}{((V_{out} + V_f) \cdot N_{ps})} \right) \right) + T_d}$$

Freq_127 = 44.725 kHz
 Freq_127 = 49.725 kHz
 Per Datasheet
 Freq_325 = 62.645 kHz

- There are some discrepancies in R1, R2, CD value calculation assuming simulation file was made for datasheet example