

Estimated temperature Rise

$$T_{rise} = K_3 \cdot (\text{Core loss (W)} + \text{Copper loss (W)})^{0.833} \quad (^\circ\text{C})$$

$$\text{copper loss} = I_{rms}^2 \times \text{DCR (Typ)} / 1000$$

$$\text{Core loss} = K_2 \times (\text{Freq kHz})^{1.26 \sim n} \times (\Delta B)^{2.11 \sim n}$$

$$\Delta B = K_1 \times \text{Volt-}\mu\text{sec} \times 100$$