



$B+ = 400V$ $I_a = 60mA$ $E_g = -70V$ $R_{Lac} = 10K/20W @ 500Hz$

CLASS B $R_L = 10K/4 = 2.5K \rightarrow I_a = 400V/2.5K = 160mA$

CLASS A $R_L = 10K/2 = 5K \rightarrow I_a = 400V/5K = 80mA$

Current Change in A $I_a = 80mA + 60mA = 140mA$

CLASS A power (1 tube) $= (400V - 110V)^2 / (2 \times 5K) = 8.41W$

CLASS A power (2 tubes) $= 8.41 \times 2 = 16.82W$

Peak Swing $= (400V - 115V) = 285V_{pk}$

$V_{rms} = a \cdot a = 2 \times 285 \times 0.707 = 402.99V_{rms}$ why?

Max class AB1 power $= (402.99)^2 / 10K = 16.24W$