

# Distortion Measurements 4/8/09

$$V_{in} = 800 \text{ mV (p-p)}$$

$$V_{out} = 6.02 \text{ V (p-p)}$$

- Measurements made w/ feedback

$$R_{feedback} = 4.7 \text{ k}$$

$$R_L = 7.6 \Omega$$

$$f_{in} = 1 \text{ kHz}$$

$$\Rightarrow THD = 0.45\%$$

$$\begin{cases} I_{bias1} = I_{bias2} = 35 \text{ mA} \\ V_{plate1} = V_{plate2} = 55 \text{ V} \end{cases}$$

$$P_{out} = 3.75 \text{ watts (peak)}$$

$$P_{out \text{ max}} = 429.3 \text{ W (peak)}$$

$$\text{for } I_{bias1} = I_{bias2} = 40 \text{ mA}$$

$$THD = 0.45\%$$

$$\text{for } I_{bias1} = I_{bias2} = 45 \text{ mA}$$

$$THD = 0.45\%$$

$$\text{for } I_{bias1} = I_{bias2} = 0.035 \text{ A}$$

$$V_{in \text{ p-p}} = 1 \text{ V (p-p)}$$

$$V_{out} = 19.25 \Rightarrow P_{out \text{ (peak)}} = 38.6 \text{ W}$$

$$THD = 0.775\%$$