

Test report

Date: 14.01.2017

Amplifier

6N6P_PP, OPT. Indel TGL20/002 10k:8, +Ub = 240 V, Ia = 35 mA

1. Frequency response

| | | | | | | | | | |
|-------------------|-------|-------|-------|--|-------|-------|-------|------|--------|
| Negative feedback | No | Power | 3 W | Freq. Response limited at the op. Amp. | | | | | |
| Frequency [Hz] | 20 | 50 | 100 | 1k | 10k | 20k | 50k | 100k | Rload |
| [dB] | -0,56 | -0,33 | -0,17 | 0,00 | -0,29 | -1,57 | -7,10 | | 8 ohm. |
| [dB] | | | | | | | | | |

| | | | | | | | | | |
|-------------------|-------|-------|------|------|------|-------|-------|-------|--------|
| Negative feedback | 17 dB | Power | 3 W | | | | | | |
| Frequency [Hz] | <10 | 50 | 100 | 1k | 10k | 20k | 50k | 100k | Rload |
| [dB] | -0,10 | 0,00 | 0,00 | 0,00 | 0,00 | -0,10 | -0,65 | -2,90 | 8 ohm. |
| [dB] | | | | | | | | | |

2. THD

| | | | | | | | | | |
|---------|-------|--------|-------|-------|--------|-------|-------|-----|-----------|
| No GNFB | | | | | | Bias: | | | |
| Freq. | 30 Hz | 100 Hz | 1 kHz | 3 kHz | 10 kHz | Power | Ik = | 35 | mA (tot.) |
| D [%] | 3,06 | 1,07 | 0,61 | 0,66 | 0,72 | 1 W | Ua = | 237 | V |
| D [%] | 3,42 | 1,30 | 0,98 | 1,05 | 1,24 | 3 W | Ug2 = | | V |
| D [%] | 3,07 | 2,19 | 1,96 | 1,96 | 1,35 | 7 W | Uk = | 8,7 | V |

| | | | | | | | | | |
|---------|-------|--------|-------|-------|--------|-------|-------------|--|--|
| Freq. | 30 Hz | 100 Hz | 1 kHz | 3 kHz | 10 kHz | Power | NFB = 17 dB | | |
| D [%] | 0,40 | 0,13 | 0,08 | 0,09 | 0,12 | 1 W | | | |
| D [%] | 0,43 | 0,16 | 0,12 | 0,13 | 0,21 | 3 W | | | |
| D [%] | 0,50 | 0,35 | 0,29 | 0,30 | 0,38 | 7 W | | | |

3. Output impedance

| | | |
|--------|------|-------|
| Output | | |
| 8 ohm. | 0.37 | [Ω] |
| 4 ohm. | | [Ω] |

4. S/N [dB] ref. [W] A-weighting

5. S/Hum [dB] ref. [W] broad band

6. THD vs. Pout

| Power | THD | | THD |
|-------|--------|--|--------|
| | No NFB | | NFB ON |
| [W] | [%] | | [%] |
| 1 | 0,56 | | 0,08 |
| 2 | 0,86 | | 0,11 |
| 3 | 0,89 | | 0,12 |
| 4 | 0,71 | | 0,09 |
| 5 | 0,95 | | 0,12 |
| 6 | 1,51 | | 0,19 |
| 7 | 2,00 | | 0,30 |
| 8 | 2,79 | | 0,45 |
| | | | |
| | | | |

Test freq. 1 kHz

---> I_k = 65 mA