

63 W broadband power amplifier from TOELLNER®

TOE 7608



- ❖ Frequency range DC to 500 kHz
- ❖ Short-circuit and no-load proof
- ❖ Feedback voltage protection up to 120 V
- ❖ 115 V_{rms} output voltage with TOE 7608 S

Function/signal generators generally provide signals with a small amplitude into 50-Ohm systems.

Signal conditioning and amplification are therefore required in many technical areas.

The TOE 7608 broadband amplifier is suitable as a non-inverting power output stage for the amplification of such signal sources. Each generator with an output voltage of 20 V_{pp} is able to cover the full operating range of the TOE 7608 amplifier; the power is 63 W into 8 Ohm at a max. output amplitude of 45 V_{pp}. The bandwidth is DC to 500 kHz.

Overcurrent protection at the output, protection against feedback voltages and overtemperature protection provide the amplifier with a high degree of operational safety.

The TOE 7608 S is a special version and provides higher output voltages in a limited frequency range.

Voltages up to 115 V_{rms} into 400 Ohm can be generated in this case at an output power of > 30 W and in a frequency range from 15 Hz to 20 kHz.

Other output voltages (e.g. 230 V_{rms}) or frequency ranges are available on request.

Specifications

TOE 7608 amplifier data

Frequency range: 0 to 500 kHz (-3 dB)

AC coupling: Approx. 3 Hz to 500 kHz (-3 dB)

Gain:

Non-inverting, fixed at +7 dB with input impedance > 10 kOhm, and +13 dB with input impedance 50 Ohm

Input impedance:

AC coupling: > 10 kOhm (pass band),

DC coupling: > 10 kOhm or 50 Ohm, selectable

Permissible input voltage:

max. 10 V_{rms}, continuous

Output impedance:

Approx. 0.2 Ohm, short-circuit and no-load proof

Output voltage:

Max. ± 22.5 V into 8 Ohm load

Response times: t_r, t_f < 0.8 μs

Output noise:

< 1 mV_{rms} with short-circuited input

Distortion: < 0.1 % up to 50 kHz,
< 0.2 % up to 100 kHz

Feedback voltage protection:

Up to 120 V, fused by F4AC according to DIN 41661, IEC 127-2/II

TOE 7608 S amplifier data

Frequency range: 15 Hz to 20 kHz (-3 dB)

Gain:

Non-inverting, fixed at +7 dB with input impedance > 10 kOhm, and +13 dB with input impedance 50 Ohm

Input impedance:

AC coupling: > 10 kOhm (pass band),

DC coupling: > 10 kOhm or 50 Ohm, selectable

Permissible input voltage: max. 10 V_{rms}, continuous

Output impedance:

Approx. 70 Ohm, short-circuit and no-load proof

Output voltage:

Max. 115 V_{rms} into 400 Ohm load

Output noise:

< 5 mV_{rms} with short-circuited input

Distortion:

< 0.5 % at V_{out} < 100 V_{rms} into 400 Ohm load in frequency range 50 Hz to 20 kHz

Feedback voltage protection:

fused by F 0.5 AC according to DIN 41661, IEC 127-2/II

General data

Mains voltage:

115V/230 V ± 10 %, 48 Hz to 65 Hz

Amplifier fusing:

115 V: T4AC, 230 V: T2AC according to DIN 41662, IEC 127-2/II

Power consumption: max. 180 VA

Operating temperature: 0 to 50 °C

Dimensions:

265 x 147 x 375 mm (WxHxD)

Weight: approx. 8.2 kg

Housing: Aluminium

Ordering data

Broadband power amplifier TOE 7608

Broadband power amplifier TOE 7608 S

Options

19" adapter, 3HU TOE 9501

19" adapter, 4HU TOE 9503

Carrying handle TOE 9008