

7W AUDIO AMPLIFIER

NOT FOR NEW DESIGN

The TBA810P is an improvement of TBA810S.

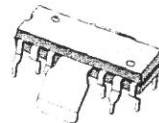
It offers:

- Higher output power ($R_L = 4\Omega$ and 2Ω)
- Low noise
- Polarity inversion protection
- Fortuitous open ground protection
- High supply voltage rejection (40dB min.)

The TBA810P is a monolithic integrated circuit in a 12-lead quad in-line plastic package, intended for use as a low frequency class B amplifier.

The TBA810P provides 7W output power at $16V/4\Omega$; 7W at $14.4/2\Omega$.

It gives high output current (up to 3A), high efficiency (75% at 60W output) very low harmonic and crossover distortion. The circuit is provided with a thermal limiting circuit and can withstand a short-circuit on the load for supply voltages up to 15V.



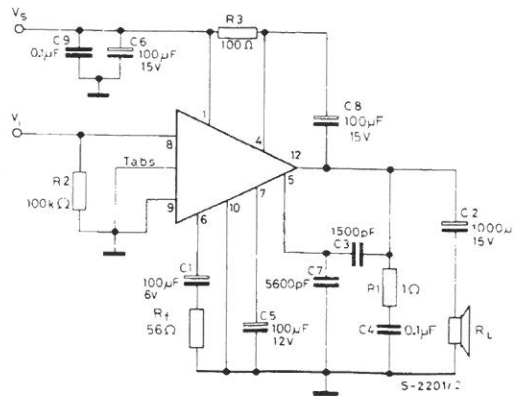
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ORDER CODE: TBA810P

ABSOLUTE MAXIMUM RATINGS

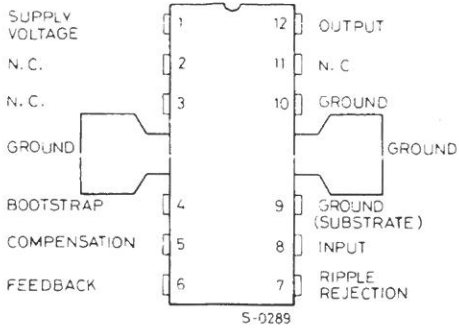
| | | | |
|----------------|--|------------|------------|
| V_s | Supply voltage | 20 | V |
| I_o | Output peak current (non repetitive) | 4 | A |
| I_o | Output peak current (repetitive) | 3 | A |
| P_{tot} | Power dissipation at $T_{amb} \leq 80^\circ C$ | 1 | W |
| | $T_{tab} \leq 90^\circ C$ | 5 | W |
| T_{stg}, T_j | Storage and junction temperature | -40 to 150 | $^\circ C$ |

TEST AND APPLICATION CIRCUIT

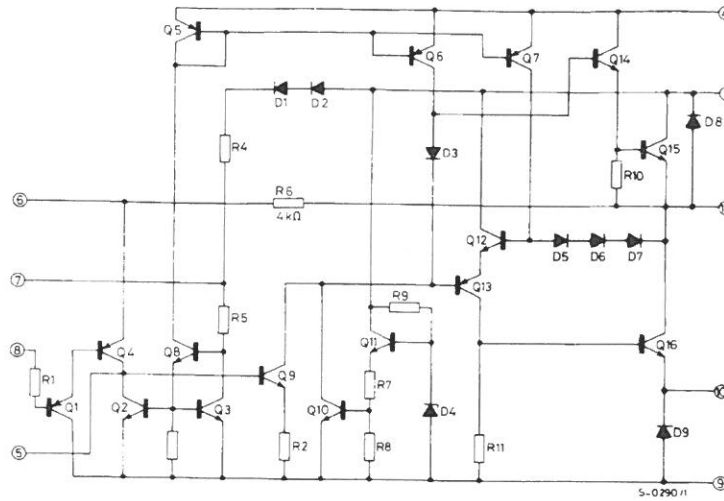


TBA810P

CONNECTION DIAGRAM (Top view)



SCHEMATIC DIAGRAM



THERMAL DATA

| | | | | |
|---------------|-------------------------------------|-----|-----|---------------|
| $R_{thj-tab}$ | Thermal resistance junction-tab | max | 12 | $^{\circ}C/W$ |
| $R_{thj-amb}$ | Thermal resistance junction-ambient | max | 70* | $^{\circ}C/W$ |

* Obtained with tabs soldered to printed circuit with minimized copper area

2/3



232

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