



## Monolithic Integrated Circuit

Application: Audio-Amplifier for portable radios, cassette recorders and general purposes.

## Features:

- Large supply voltage range
  V<sub>S</sub> = 3...16 V
- Low cross-over distortion
- Low harmonic distortion

- Audio output power  $P_o = 1.5 \text{ W}$
- Connection possibility for an external capacitor to suppress hum voltage
- Minimum number of external components

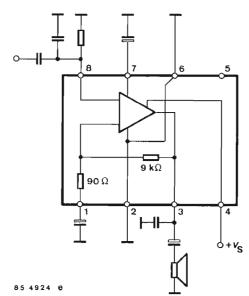


Fig. 1 Block diagram and pin connections

## Absolute maximum ratings

Reference point Pin 2, Pin 6

Supply voltage	Pin 4	Vs	16	v
Peak output current	Pin 3	I <sub>OM</sub>	850	mA
Power dissipation $T_{amb} = 50^{\circ}C$		P <sub>tot</sub>	1	w
Junction temperature		Ti	150	°C
Storage temperature range		T <sub>stg</sub>	-25+150	°C
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change consistance				Min.	Typ.	Max.	older of the second
Junction ambient			R <sub>thJA</sub>			100	к/W
<b>Rectrical characteristics</b> $V_{\rm S} = 9$ V, reference point l $R_{\rm L} = 8 \Omega, d = 10\%, T_{\rm amb} =$							
Supply voltage range		Pin 4	Vs	3		16	v
Quiescent output voltage		Pin 3	V <sub>ов</sub>	3.9		4.7	v
Quiescent drain current $V_{\rm S} = 3 V$ $V_{\rm S} = 9 V$ $V_{\rm S} = 16 V$	Fig. 2	Pin 4	I <sub>SB</sub> I <sub>SB</sub> I <sub>SB</sub>	2 3.5 3.5	3 7.5 7	6 12 10	mA mA mA
Output power $V_{\rm S}$ = 6 V, $R_{\rm L}$ = 4 $\Omega$			Po Po	0.9 0.6	1		W
Supply voltage rejection ratio $V_{hum} = 0.35 \text{ V}, C_1 = 47 \mu \text{ F},$		) Hz	SVR		30		dB
Input resistance		Pin 8	Ri	800			kΩ
Band width (–3 dB)	Fig. 2		В		1002	B0 <b>0</b> 0	Hz
Distortion $P_{\rm o} = 50  {\rm mW}$	Fig. 2		d		0.4	1	%
Voltage gain, closed loop			Gv	37	40	43	dB
Output noise voltage $R_{\rm G} = 0, B = 2222000$ H:	z	Pin 3	V <sub>no</sub>		250	. 600	μV

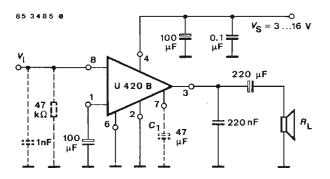


Fig. 2 Test circuit for:  $P_{o}$ ,  $P_{tot}$ , d,  $V_{nor}$ , B,  $G_{v}$  and application note

