

T-74-0501

Monolithic Integrated Circuit

Application: Dual Low voltage Power Amplifier, especially for portable radios and cassette players

Features:

- Supply voltage range 1.8 V to 10 V
- Low crossover distortion
- Very low radiation due to low cut-off frequency
- Low quiescent current
- Stereo configuration
- Audio output power 2×0.7 W

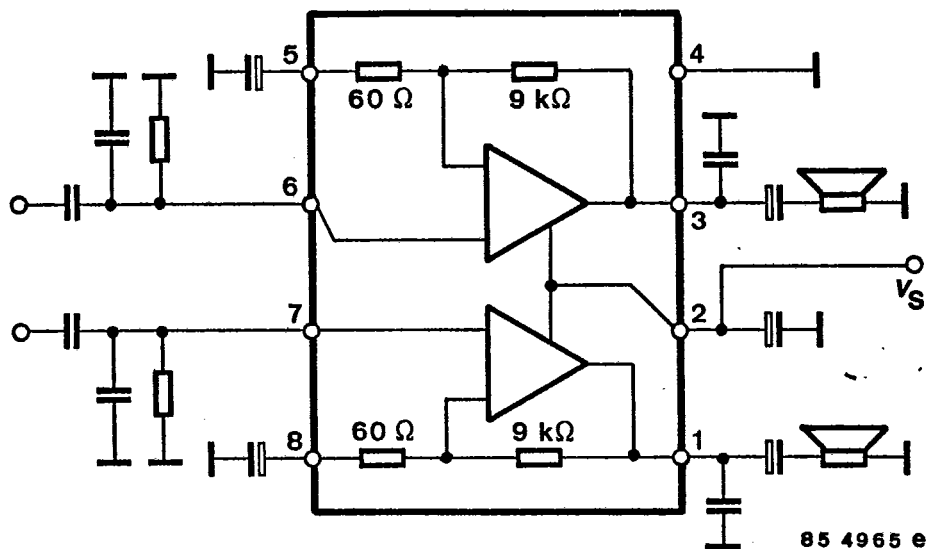


Fig.1 Block diagram and pin connections

Absolute maximum ratings

Reference point Pin 4, unless otherwise specified

Supply voltage	V_S	10	V
Power dissipation $T_{amb} = 50^\circ\text{C}$	P_{tot}	1	W
Junction temperature	T_J	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-25...+150	$^\circ\text{C}$

Thermal resistance

Junction ambient	R_{thJA}	Min.	Typ.	Max.	
				100	K/W

Electrical characteristics

 $V_S = 4.5\text{ V}$, $T_{amb} = 25^\circ\text{C}$, reference point Pin 4, unless otherwise specified

Supply voltage range	Pin 2	V_S	1.8	10	V
Quiescent drain current $R_L = \infty$	Pin 2	I_S	5	12	16 mA
Output power $d = 10\%$, $f = 1\text{ kHz}$					
$V_S = 2.0\text{ V}$, $R_L = 4\ \Omega$	Pin 1, 3	P_o	25		mW
$V_S = 3.0\text{ V}$, $R_L = 8\ \Omega$	Pin 1, 3	P_o	65		mW
$V_S = 4.5\text{ V}$, $R_L = 8\ \Omega$	Pin 1, 3	P_o	200		mW
$V_S = 9.0\text{ V}$, $R_L = 12\ \Omega$	Pin 1, 3	P_o	650		mW
$V_S = 6.0\text{ V}$, $R_L = 16\ \Omega$	Pin 1, 3	P_o	220		mW
$V_S = 3.0\text{ V}$, $R_L = 32\ \Omega$	Pin 1, 3	P_o	20		mW
$V_S = 4.5\text{ V}$, $R_L = 32\ \Omega$	Pin 1, 3	P_o	60		mW
Distortion $P_o = 50\text{ mW}$, $R_L = 8\ \Omega$	Pin 1, 3	d	0.5		%
Closed loop voltage gain $f = 1\text{ kHz}$	Pin 1, 3	G_{vf}	40	43	dB
Power bandwidth (-3 dB)	Pin 1, 3	B		30	kHz
Input resistance	Pin 6, 7	R_i	800		k Ω
Input noise voltage $R_S = 0$, B = 22 Hz...22 kHz	Pin 6, 7	V_{ni}		2.5	μV
Supply voltage rejection ratio $V_{hum} = 0.2\text{ V}$, $f_{hum} = 100\text{ Hz}$	Pin 1, 3	SVR		15	dB
Channel separation $f = 1\text{ kHz}$, $P_o = 0.25\text{ W}$					
Channel 1 $\longleftrightarrow$ Channel 2	Pin 1 $\longleftrightarrow$ 3			46	dB

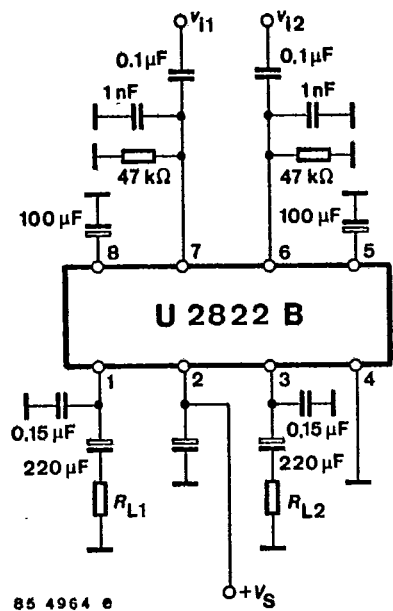
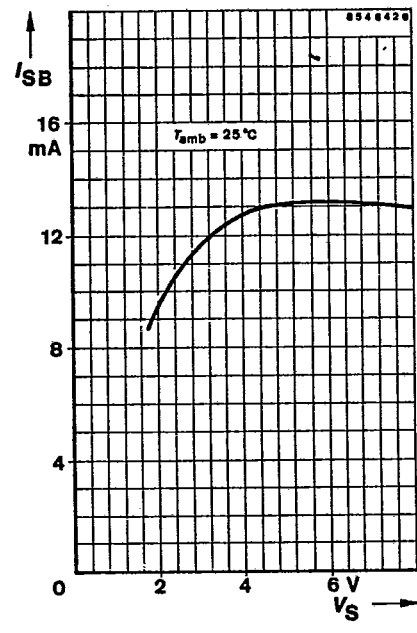
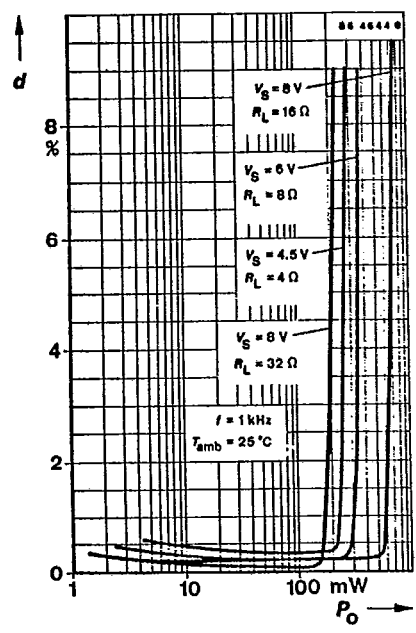
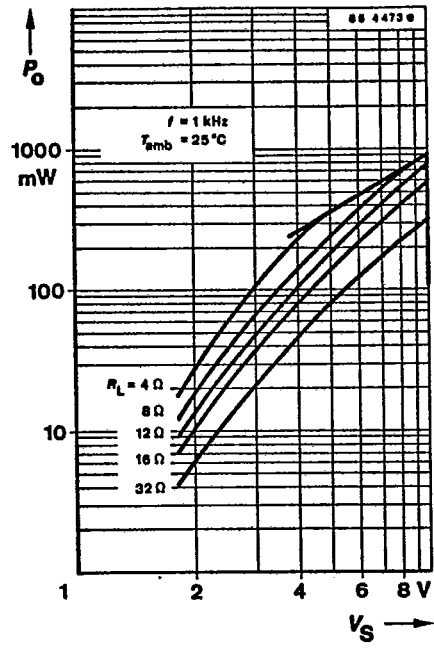


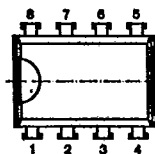
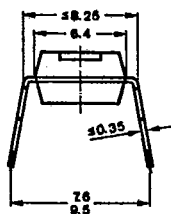
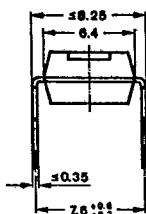
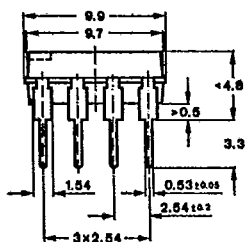
Fig. 2 Test circuit



U 2822 B

T-74-05-01

Dimensions in mm



0 610 0

Case
DIP 8
Weight max. 0.8 g