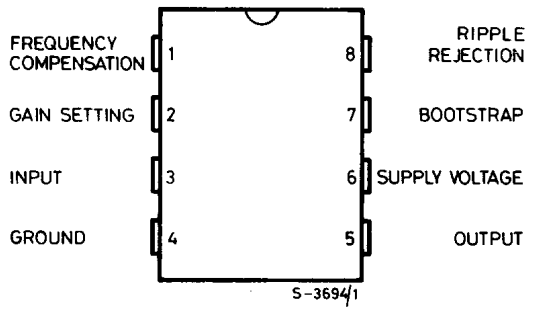
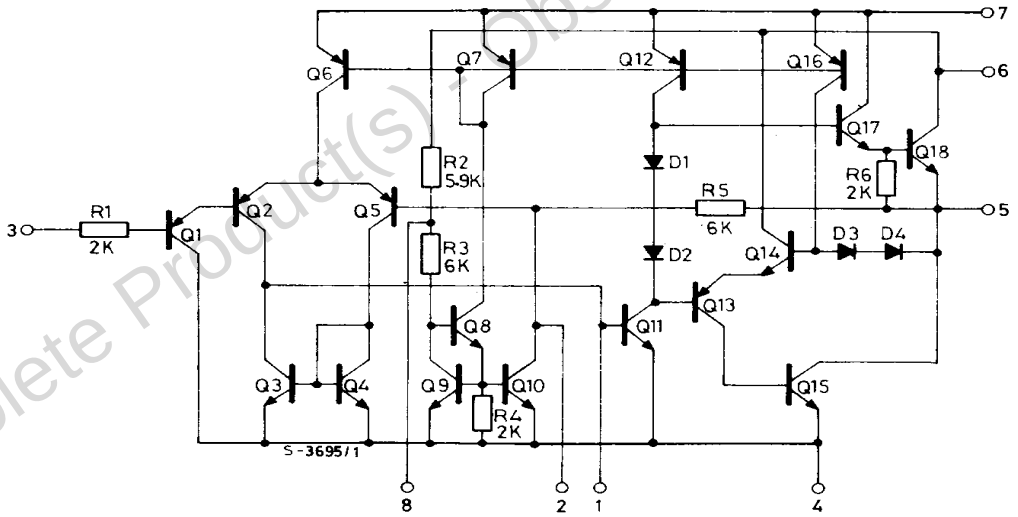
PIN CONNECTION (top view)



SCHEMATIC DIAGRAM



THERMAL DATA

Symbol	Parameter		Value	Unit
$R_{th\text{-}j\text{-}amb}$	Thermal resistance junction-ambient	max	100	°C/W

ELECTRICAL CHARACTERISTICS (Refer to the test circuits Vs = 9V, T_{amb} = 25 °C unless otherwise specified)

Symbol	Parameter	Test conditions		Min.	Typ.	Max.	Unit
V_s	Supply voltage			3		16	V
V_o	Quiescent output voltage (pin 5)			4	4.5	5	V
I_d	Quiescent drain current				4	12	mA
I_b	Bias current (pin 3)				0.1		µA
P_o	Output power	d = 10% R_f = 120Ω V_s = 12V V_s = 9V V_s = 9V V_s = 6V V_s = 3.5V	f = 1 kHz R_L = 8Ω R_L = 4Ω R_L = 8Ω R_L = 4Ω R_L = 4Ω	0.9	2 1.6 1.2 0.75 0.25		W W W W W
Ri	Input resistance (pin 3)	f = 1 kHz			5		MΩ
B	Frequency response (-3 dB)	R_L = 8Ω C_5 = 1000 µF R_f = 120Ω	C_B = 680 pF	25 to 7,000			Hz
			C_B = 220 pF	25 to 20,000			
d	Distortion	P_o = 500 mW R_L = 8Ω f = 1 kHz	R_f = 33Ω		0.8		%
			R_f = 120Ω		0.4		
G_v	Voltage gain (open loop)	f = 1 kHz	R_L = 8Ω		75		dB
G_v	Voltage gain (closed loop)	R_L = 8Ω	R_f = 33Ω		45		dB
		f = 1 kHz	R_f = 120Ω		34		
e_N	Input noise voltage (*)				3		µV
i_N	Input noise current (*)				0.4		nA
$\frac{S+N}{N}$	Signal to noise ratio (*)	P_o = 1.2W R_L = 8Ω G_v = 34 dB	R1 = 10KΩ		80		dB
			R1 = 50 kΩ		70		
SVR	Supply voltage rejection (test circuit of fig. 2)	R_L = 8Ω $f_{(ripple)}$ = 100 Hz C6 = 47 µF R_f = 120Ω			42		dB

(*) B = 22 Hz to 22 KHz

Figure 3. Output power vs. supply voltage

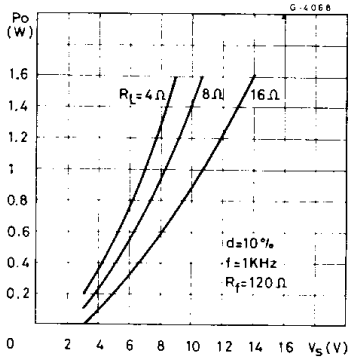


Figure 4. Harmonic distortion vs. output power

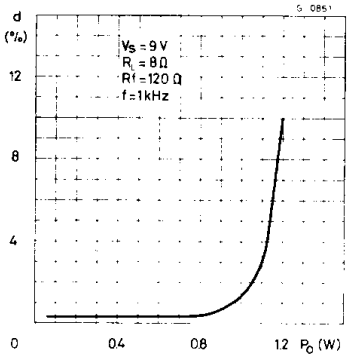


Figure 5. Power dissipation and efficiency vs. output power

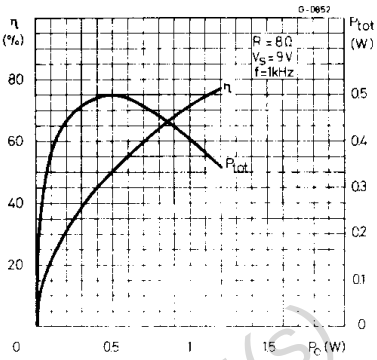


Figure 6. Maximum power dissipation (sine wave operation)

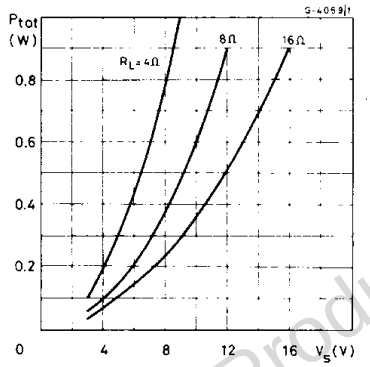


Figure 7. Suggested value of C_B vs. R_f

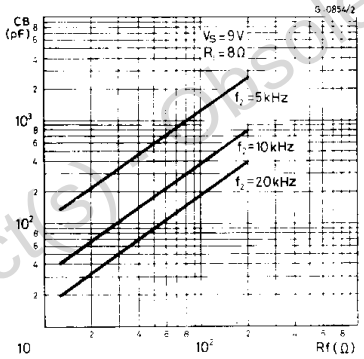


Figure 8. Frequency response

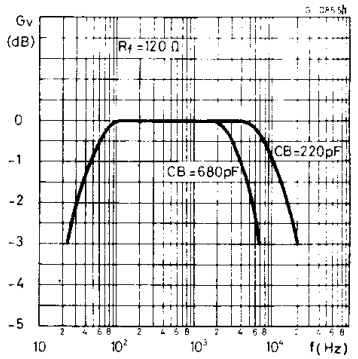


Figure 9. Harmonic distortion vs. frequency

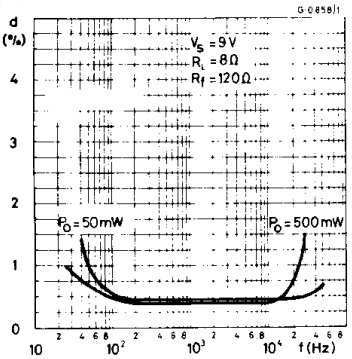


Figure 10. Supply voltage rejection (Fig. 2 circuit)

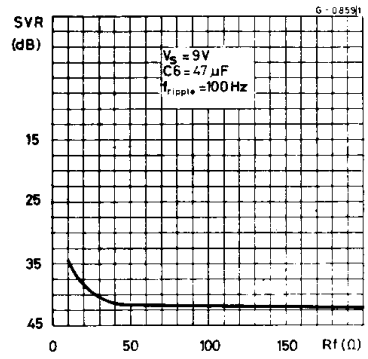
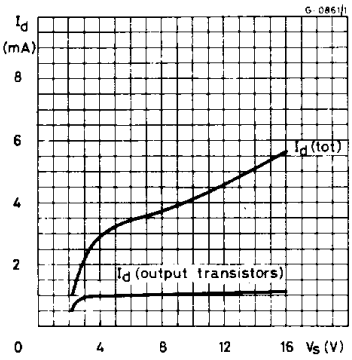
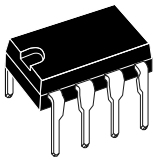


Figure 11. Quiescent current vs. supply voltage

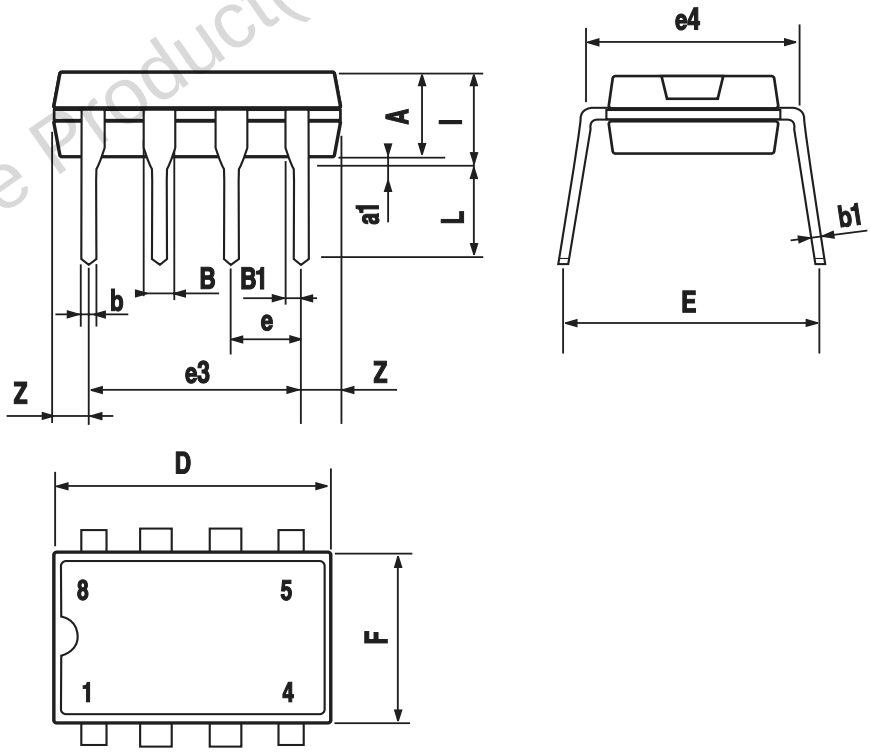


DIM.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A		3.32			0.131	
a1	0.51			0.020		
B	1.15		1.65	0.045		0.065
b	0.356		0.55	0.014		0.022
b1	0.204		0.304	0.008		0.012
D			10.92			0.430
E	7.95		9.75	0.313		0.384
e		2.54			0.100	
e3		7.62			0.300	
e4		7.62			0.300	
F			6.6			0.260
I			5.08			0.200
L	3.18		3.81	0.125		0.150
Z			1.52			0.060

OUTLINE AND MECHANICAL DATA



Minidip



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