

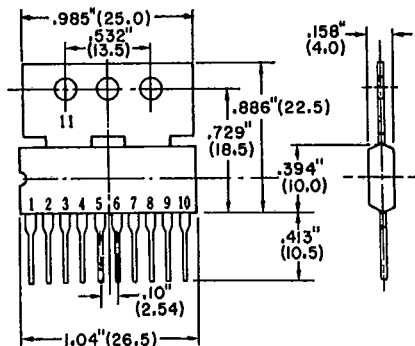
ECG1081A

4.8-WATT AUDIO POWER AMPLIFIER

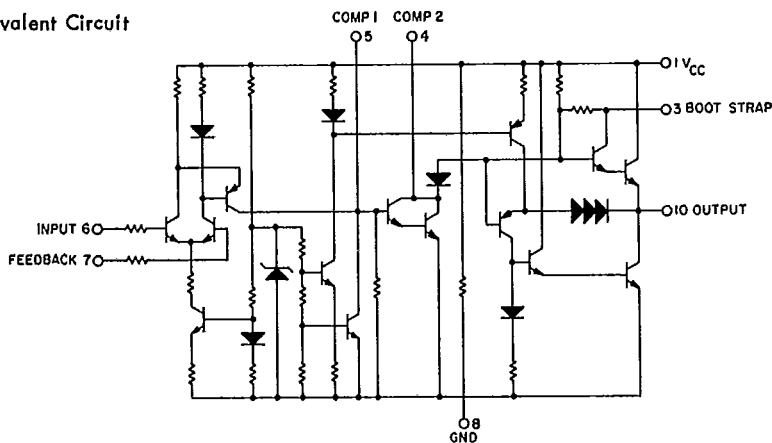
Silicon Monolithic Integrated Circuit.
 4.8-Watt (typ) Audio Power Amplifier.

MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

V_{CC1} (zero input)	20.0 V
V_{CC2} (operating)	17.0 V
I_{CC} Peak	2.5 A
P_D (with external heat sink)	7.0 W
T_{opt}	-20 to $+75^\circ\text{C}$
T_{stg}	-40 to $+150^\circ\text{C}$



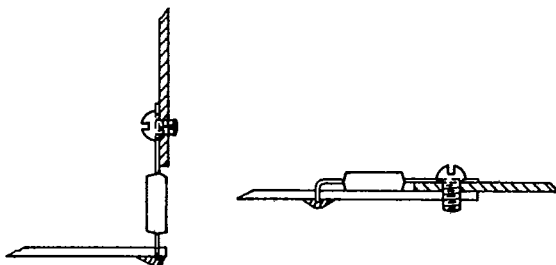
Equivalent Circuit



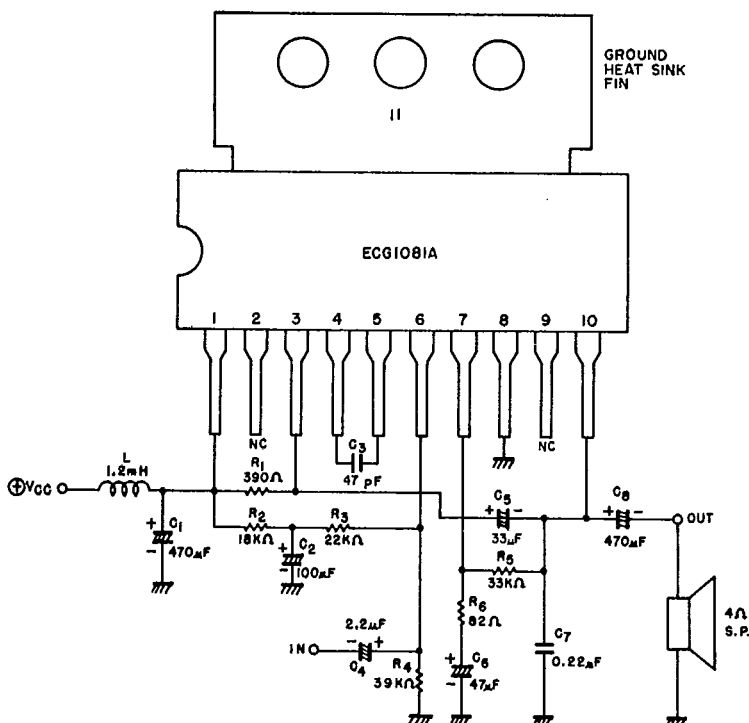
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$, $V_{CC} = 13.2\text{ V}$,
 $f = 1\text{ kHz}$, $R_L = 4\text{ Ohms}$)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Standby Current	I_{CC}	Zero Input	15	28	45	mA
Output Power	P_O	$T.H.D. = 10\%$	4.0	4.8	--	W
Total Harmonic Distortion	$T.H.D.$	$P_O = 0.5\text{ W}$	--	0.6	1.2	%
Closed-Loop Voltage Gain	GV	$P_O = 0.5\text{ W}$	49.0	51.5	52.0	dB
Output Noise Level	V_{NO}	$R_g = \infty$	--	1.4	4.0	mV

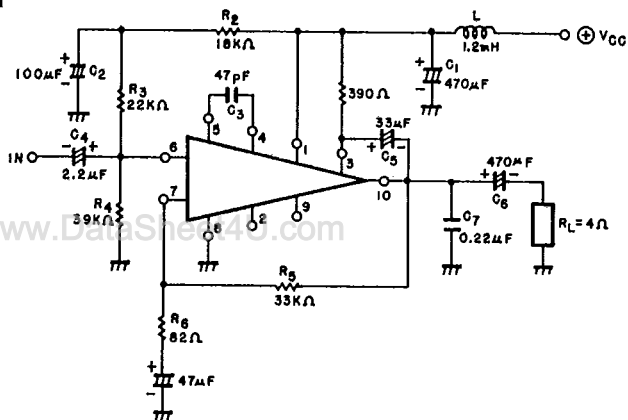
MOUNTING



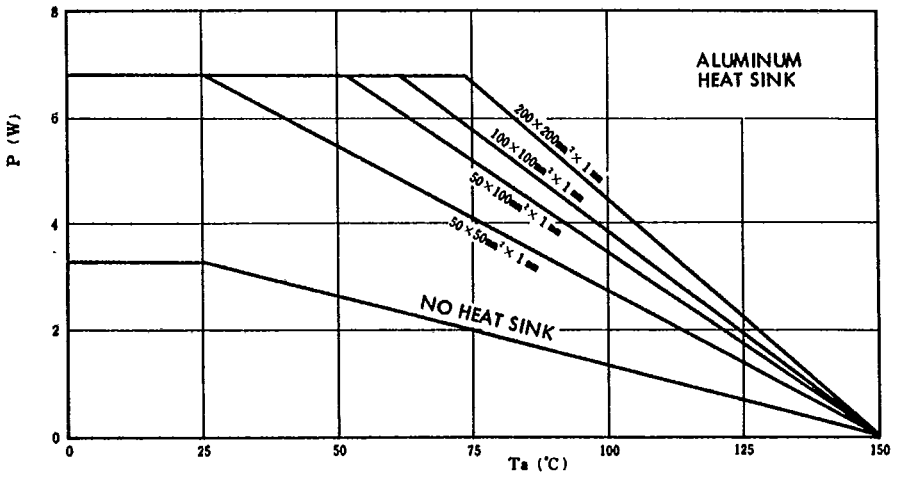
TYPICAL APPLICATION CIRCUIT



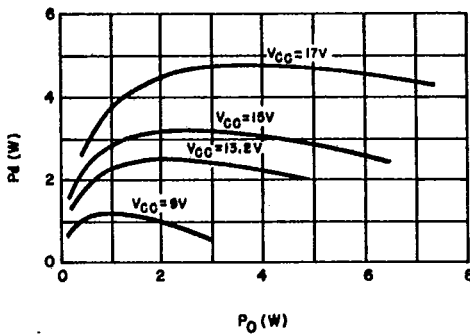
TEST CIRCUIT



Power Output vs. Case Temperature

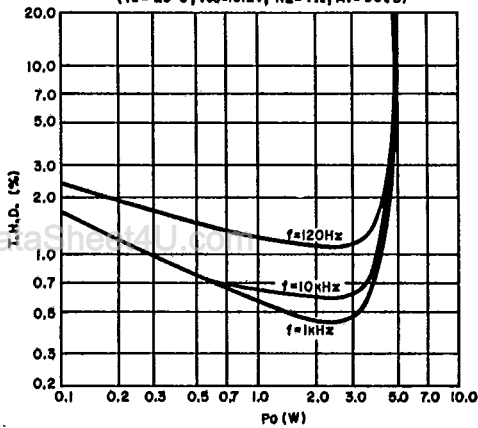


Power Output vs. Power Dissipation



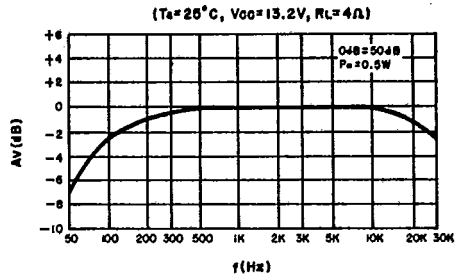
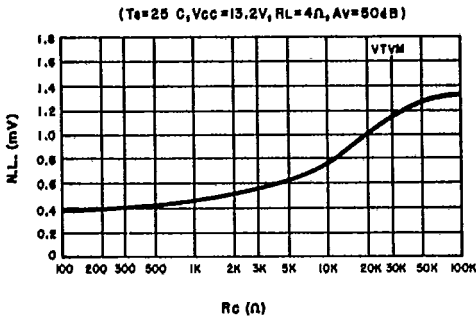
(T_a = 25°C, V_{CC} = 13.2 V, R_L = 4 Ohms, A_v = 50 dB)

(T_a = 25°C, V_{CC} = 13.2V, R_L = 4Ω, A_v = 50dB)



($T_a = 25^\circ\text{C}$, $V_{CC} = 13.2\text{ V}$, $R_L = 4\ \Omega$, $A_v = 50\text{ dB}$)

($T_a = 25^\circ\text{C}$, $V_{CC} = 13.2\text{ V}$, $R_L = 4\ \Omega$)



($T_a = 25^\circ\text{C}$, $V_{CC} = 13.2\text{ V}$, $R_L = 4\ \Omega$, $A_v = 50\text{ dB}$)

($T_a = 25^\circ\text{C}$, $R_L = 4\ \Omega$)

