

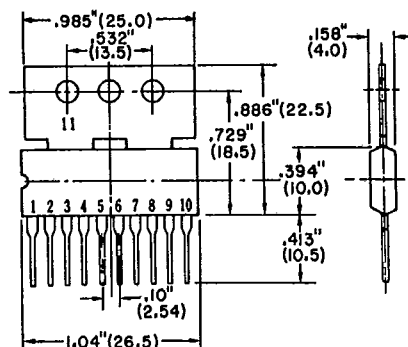
ECG1081A

4.8-WATT AUDIO POWER AMPLIFIER

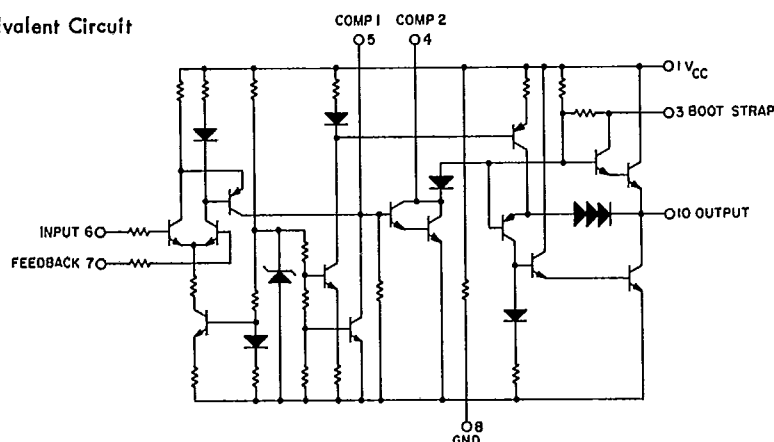
Silicon Monolithic Integrated Circuit.
4.8-Watt (typ) Audio Power Amplifier.

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 $+150^\circ\text{C}$



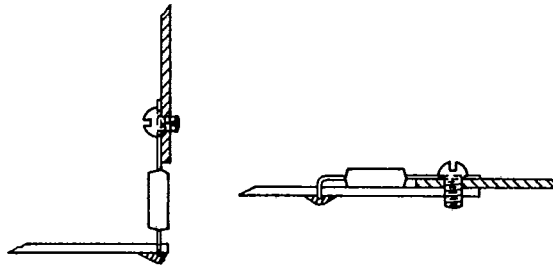
Equivalent Circuit



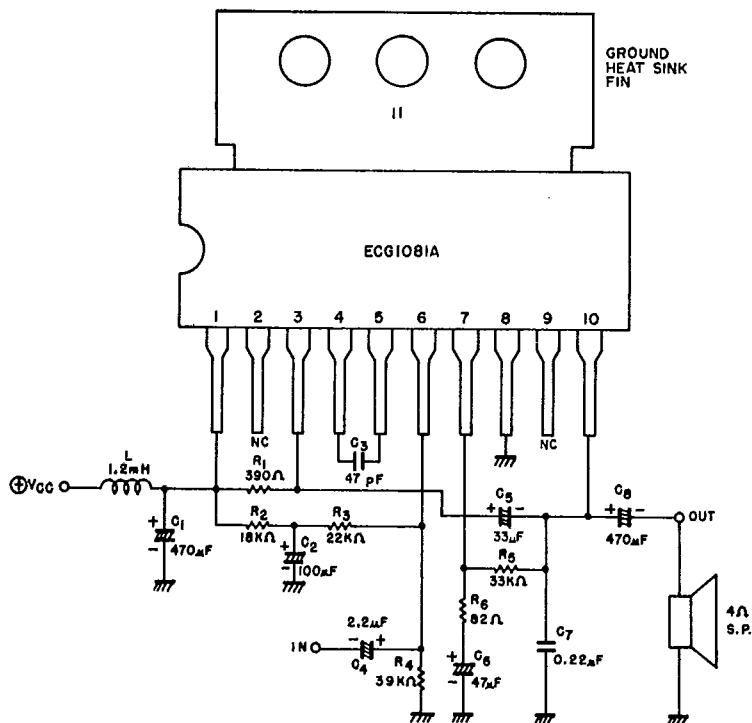
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$, $V_{cc} = 13.2\text{ V}$,
 $f = 1\text{ kHz}$, $R_L = 4\text{ Ohms}$)

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

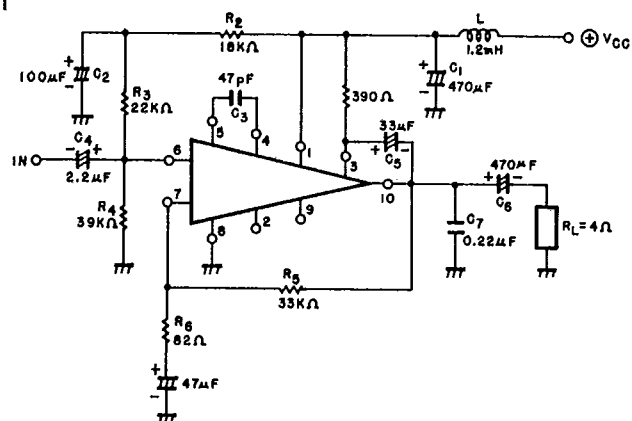
MOUNTING

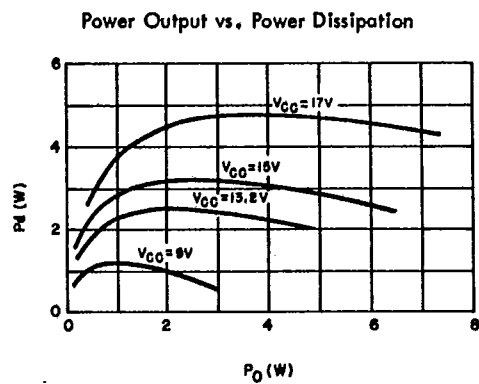
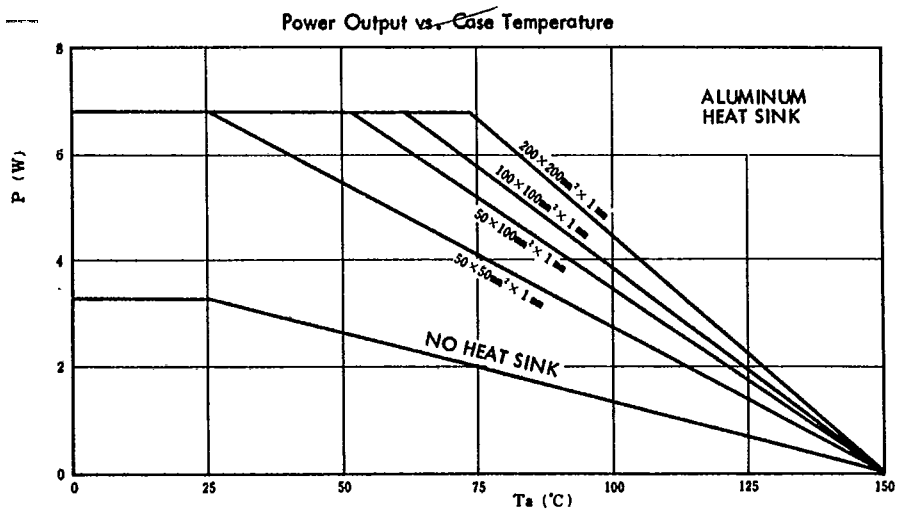


TYPICAL APPLICATION CIRCUIT

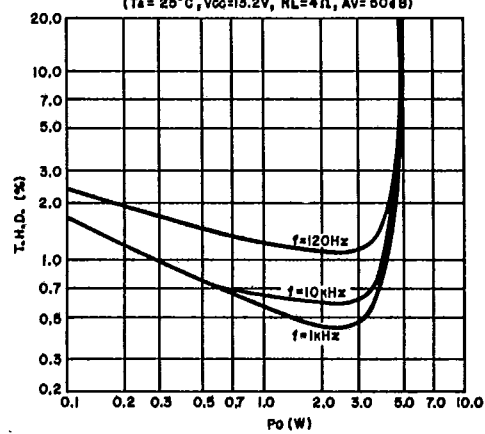


TEST CIRCUIT

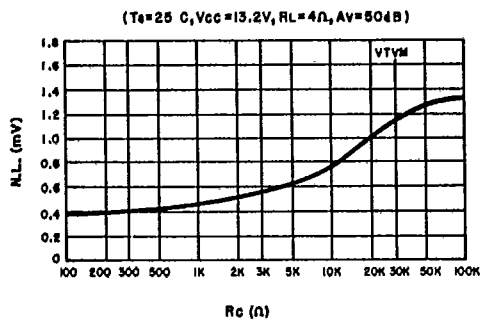




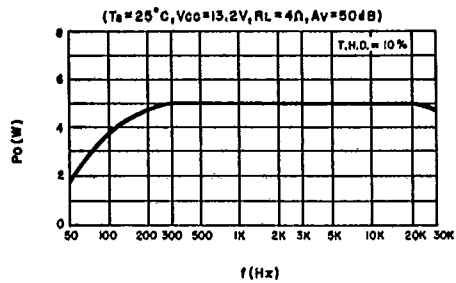
$(T_a = 25^{\circ}\text{C}, V_{cc} = 13.2\text{ V}, R_L = 4\text{ Ohms}, A_v = 50\text{ dB})$
 $(T_a = 25^{\circ}\text{C}, V_{cc} = 13.2\text{ V}, R_L = 4\text{ }\Omega, A_v = 50\text{ dB})$



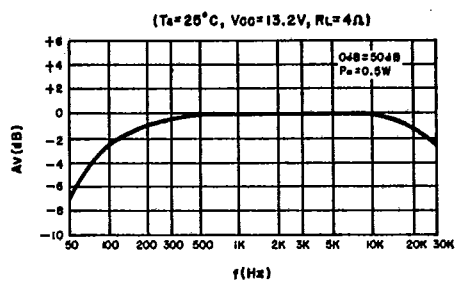
($T_a = 25^\circ\text{C}$, $V_{cc} = 13.2\text{ V}$, $R_L = 4\text{ Ohms}$,
 $A_v = 50\text{ dB}$)



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



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



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

