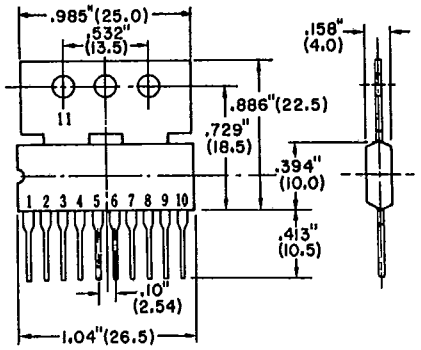
ECG1081A

4.8-WATT AUDIO POWER AMPLIFIER

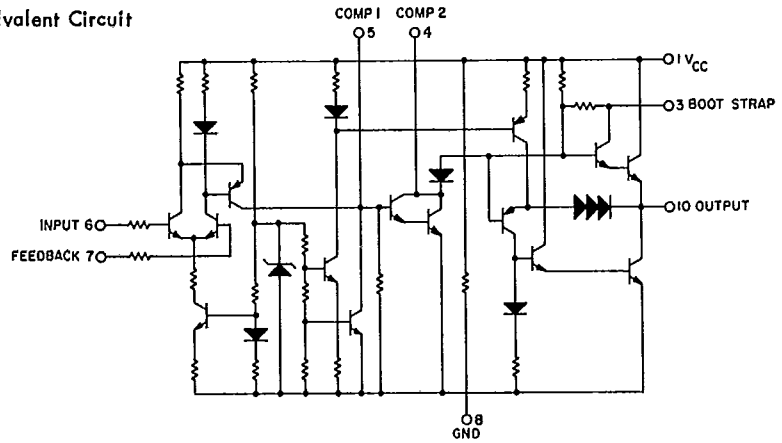
Silicon Monolithic Integrated Circuit.
4.8-Watt (typ) Audio Power Amplifier.



MAXIMUM RATINGS (Ta = 25°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° C
T_{stg} .....-40 to +150° C

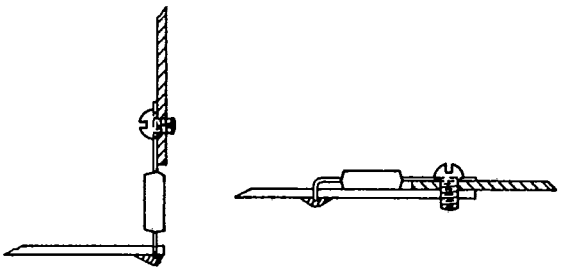
Equivalent Circuit



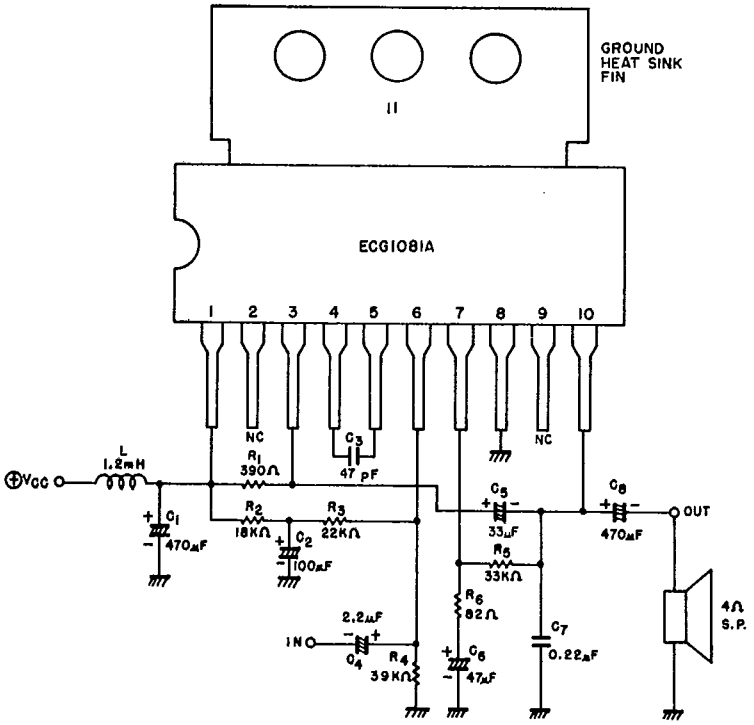
ELECTRICAL CHARACTERISTICS (Ta = 25°C, V_{cc} = 13.2 V, f = 1 khz, R_L = 4 Ohms)

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 W	--	0.6	1.2	%
Closed-Loop Voltage Gain	GV	P_o = 0.5 W	49.0	51.5	52.0	dB
Output Noise Level	V_{NO}	Rg = ∞	--	1.4	4.0	mV

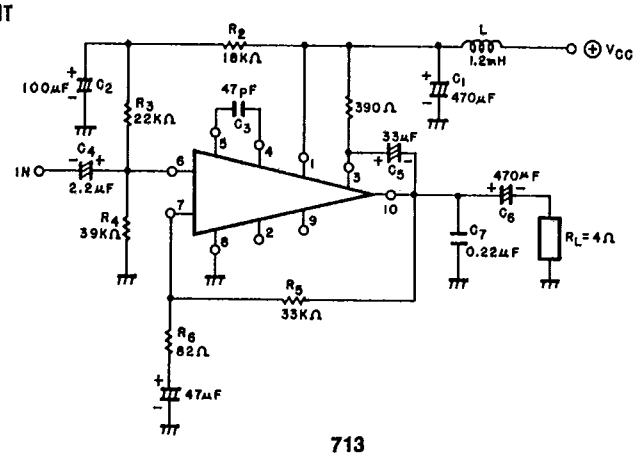
MOUNTING



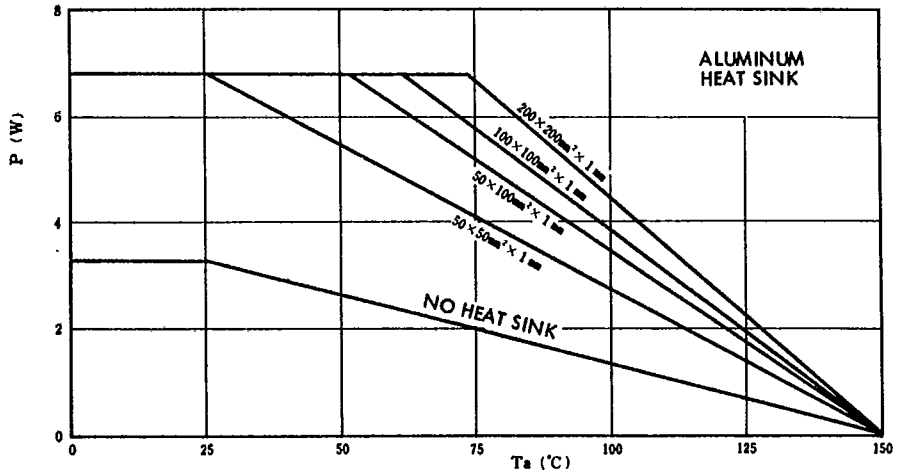
TYPICAL APPLICATION CIRCUIT



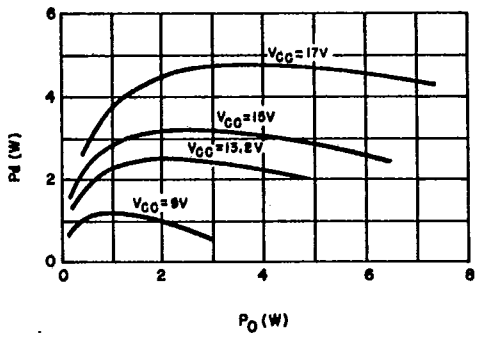
TEST CIRCUIT



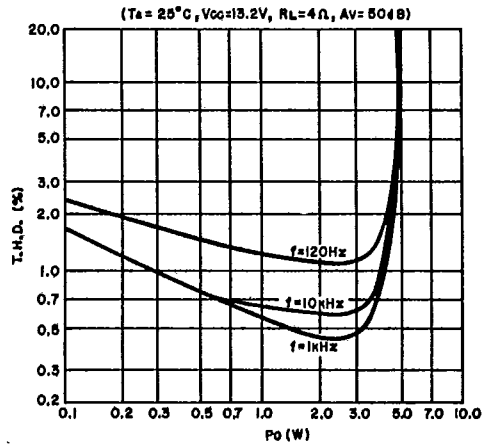
Power Output vs. Case Temperature



Power Output vs. Power Dissipation



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



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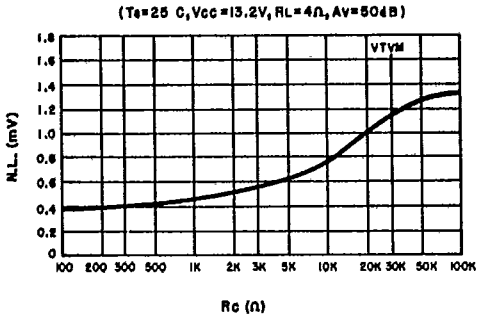
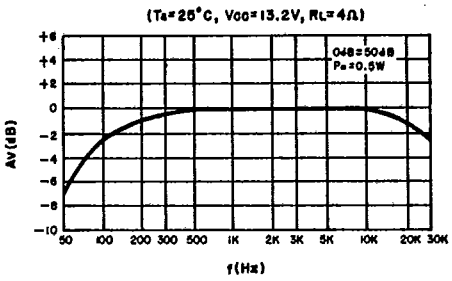
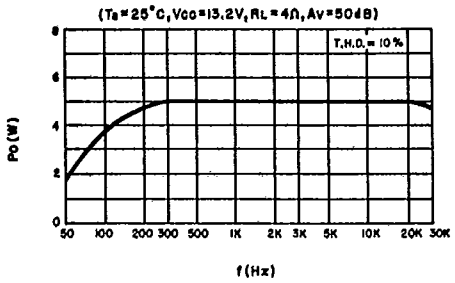


(Ta = 25°C, V_{CC} = 13.2 V, R_L = 4 Ohms)



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



(Ta = 25°C, R_L = 4 Ohms)