

T-74-05-01

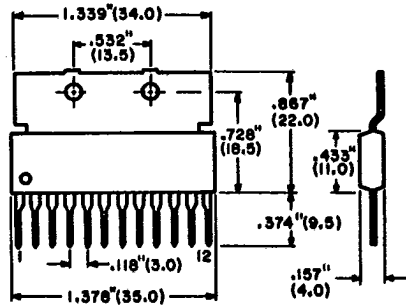
ECG[®] Semiconductors

ECG1193 AF Power Amplifier

ECG1193 is a monolithic integrated circuit used as an AF power amplifier. It has 4.5 W output power suitable for automotive radio and stereo applications operating at supply voltage of 13.2 V with a load resistance of 4 ohms.

Features

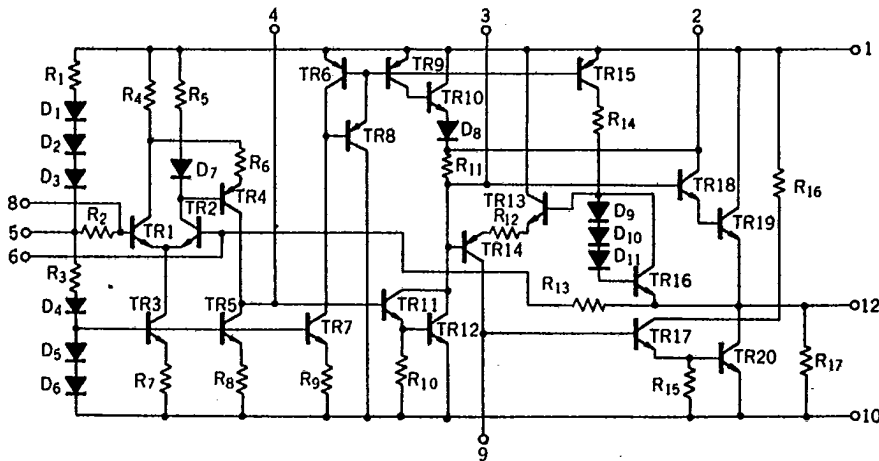
- High gain
- Low distortion
- Low noise



Absolute Maximum Ratings

Characteristic	Symbol	Rating	Unit
Supply Voltage	V _{CC} Max	18	V
Power Dissipation	P _d Max	7.0	W
Operating Temperature	T _{opg}	-20 to +75	°C
Storage Temperature	T _{stg}	-40 to +140	°C

Circuit Schematic



Electrical Characteristics: ($T_A = 25^\circ\text{C}$, $V_{CC} = 13.2\text{ V}$, $R_L = 4\text{ Ohms}$, $f = 1\text{ kHz}$)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Operating Circuit Current	I_{CCO}			50		mA
Voltage Gain	V_G	$R_{NF} = 62\ \Omega$	47	50	53	dB
Output Power	P_O	$\text{THD} = 10\%$	4.0	4.5		W
Total Harmonic Distortion	THD	$P_O = 1\text{ W}$		0.3	1.0	%
Input Impedance	r_i			20		$k\Omega$
Noise Output Voltage	V_{NO}	$R_g = 10\text{ k}\Omega$		0.6	3	mV

Application

