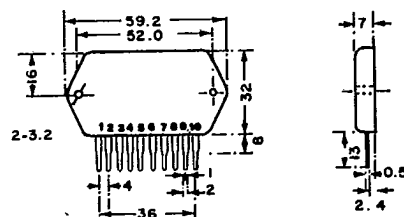


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**ECG1025, ECG1139****AUDIO POWER AMPLIFIER
MODULE**FOR AF POWER AMPLIFIER
(2 POWER SUPPLY)

dimensions in mm

Absolute Maximum Ratings/ $T_a = 25^\circ\text{C}$

Maximum Supply Voltage	V_{CC} max	± 22	V
Available Load Shorting Time	$(V_{CC} = \pm 16 \text{ V}, P_O = 10 \text{ W}, R_L = 8 \text{ Ohms}, f = 50 \text{ Hz})$	2	sec
Operating Case Temperature	T_c	85	$^\circ\text{C}$
Storage Temperature	T_{stg}	-30 - +100	$^\circ\text{C}$

Recommended Operation Ratings/ $T_a = 25^\circ\text{C}$

Recommended Supply Voltage	V_{CC}	± 16	V
Load Resistance	R_L	8	Ohms

**Operation Characteristics/ $T_a = 25^\circ\text{C}$, $V_{CC} = \pm 16 \text{ V}$, $R_L = 8 \text{ Ohms}$,
 $R_g = 600 \text{ Ohms}$, $f = 1 \text{ KHz}$**

			min	typ	max	Unit
Total Current	I_{CCO}				50	mA
Output Power	P_O	KF = 1.0 % ECG1025 ECG1139	10	13		W
			13			W
Voltage Gain	VG	$P_O = 0.1 \text{ W}$	32	33	34	dB
Distortion	KF	$P_O = 0.1 \text{ W}$			1.0	%
Input Impedance	r_i	$P_O = 0.1 \text{ W}$	20K	27K		Ohms
High Cut-off Frequency	f_{CH}	$V_i = 50 \text{ mV}$, -3 dB	100K			Hz
Low Cut-off Frequency	f_{CL}	$V_i = 50 \text{ mV}$, -3 dB			10	Hz
Power Bandwidth	PBW	KF = 1.0%, $\pm 3 \text{ dB}$		20 - 25K		Hz
Output Center Point DC Voltage	V_N		-100	0	+100	mV
Output Noise Voltage	V_{NO}	$R_g = 5 \text{ Kohms}$			3.0	mV

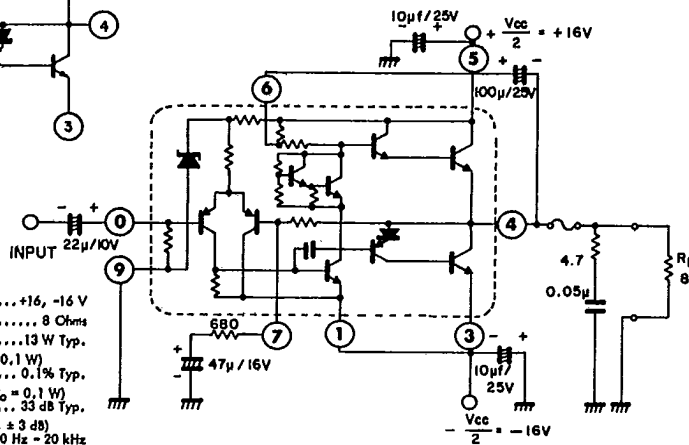
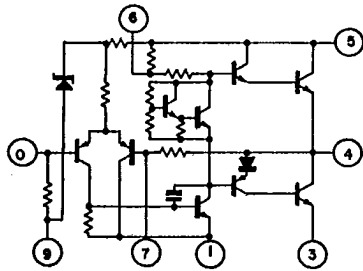
ECG1025, ECG1139

560

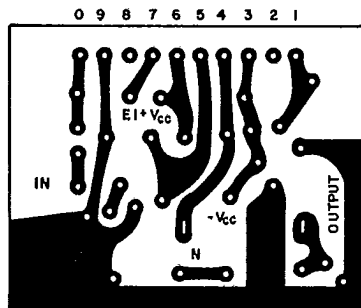
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EQUIVALENT CIRCUIT

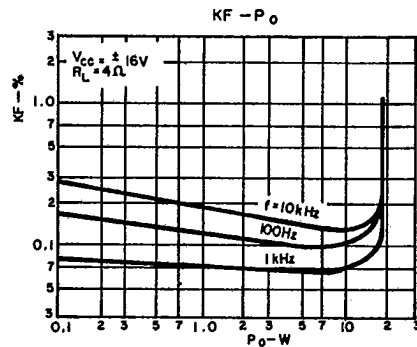
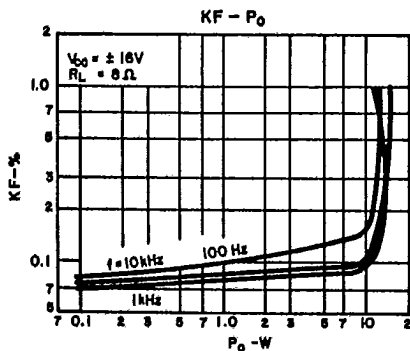
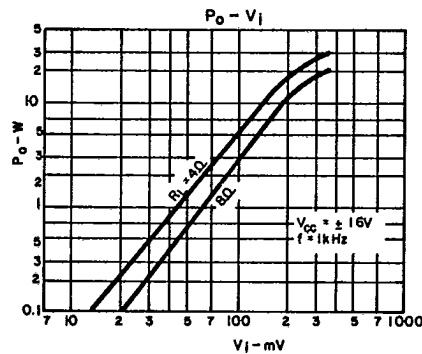
APPLICATION CIRCUIT



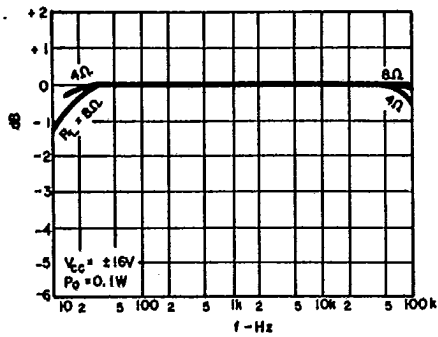
Supply Voltage.....+16, -16 V
Load 8 Ohms
Output Power (KF = 1.0%)....13 W Typ.
Distortion ($f = 1$ kHz, $P_o = 0.1$ W)
..... 0.1% Typ.
Voltage Gain ($f = 1$ kHz, $P_o = 0.1$ W)
..... 33 dB Typ.
Power Bandwidth (KF = 1%, ± 3 dB)
..... 20 Hz - 20 kHz



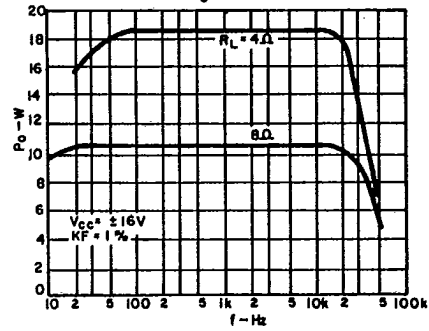
PRINTED CIRCUIT BOARD



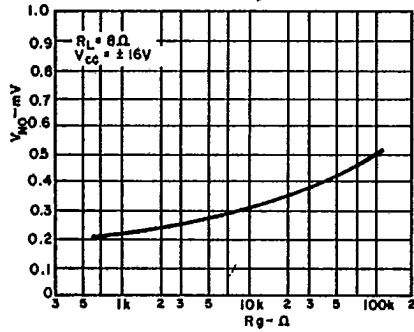
VG - f



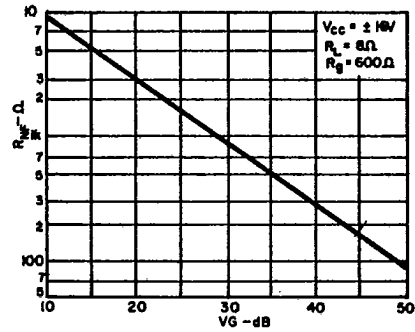
Po - f



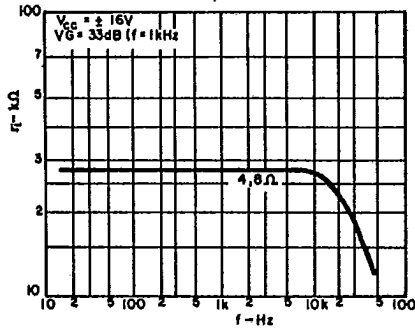
VNo - Rg



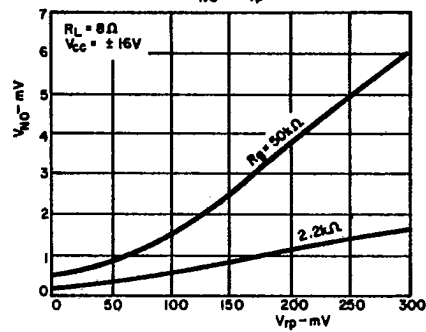
RHF - VG



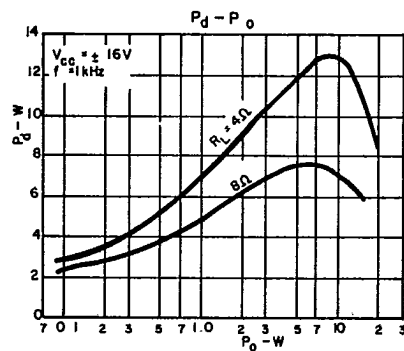
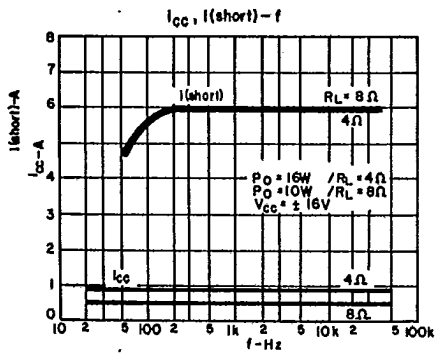
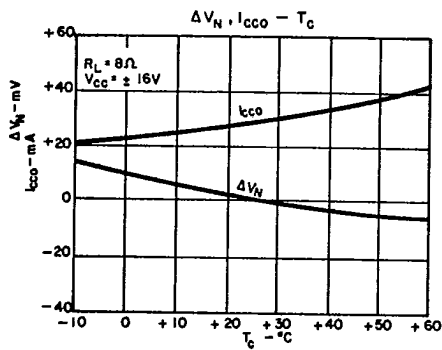
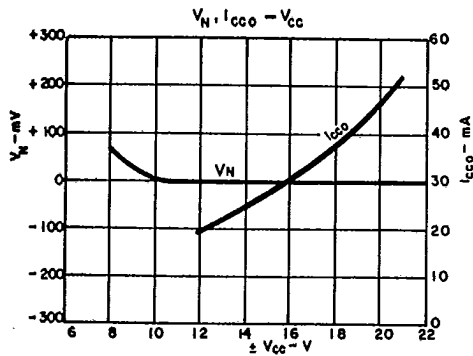
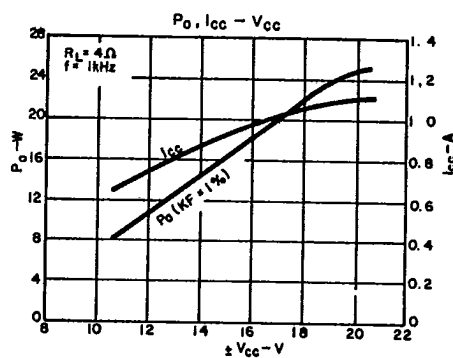
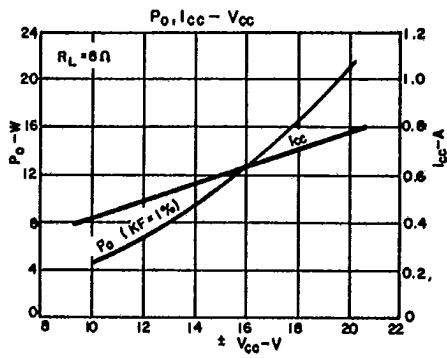
ri - f



VNo - Vrp



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