

T-74-05-01

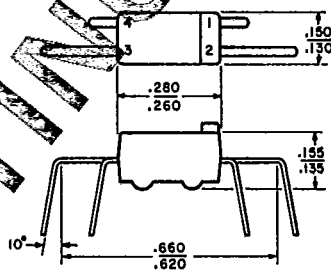


ECG752

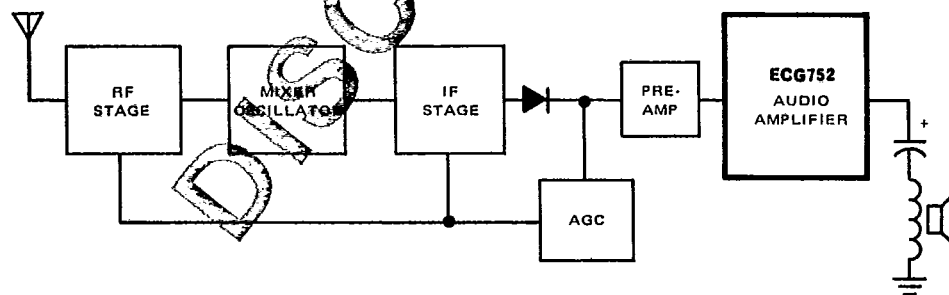
1/4-WATT AUDIO AMPLIFIER

The ECG752 is designed for the output stage of battery-powered portable radios.

- o 250 mW of Audio Output Power
- o Low Standby Current - 3.5 mA typical
- o Low Harmonic Distortion
- o Reduces Component Count in Portable Radios by Two Transformers and Two Transistors
- o Eliminates Costly Component Matching Requirements



Typical Application



Maximum Ratings ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Rating	Symbol	Value	Unit
Power Supply Voltage	V^+	12	Vdc
Power Dissipation (Package Limitation) (Soldered on a circuit board and held in free air) Derate above $T_A = 25^\circ\text{C}$	P_D	1.0	Watt
		10	mW/ $^\circ\text{C}$
Operating Temperature Range	T_A	-10 to +75	$^\circ\text{C}$

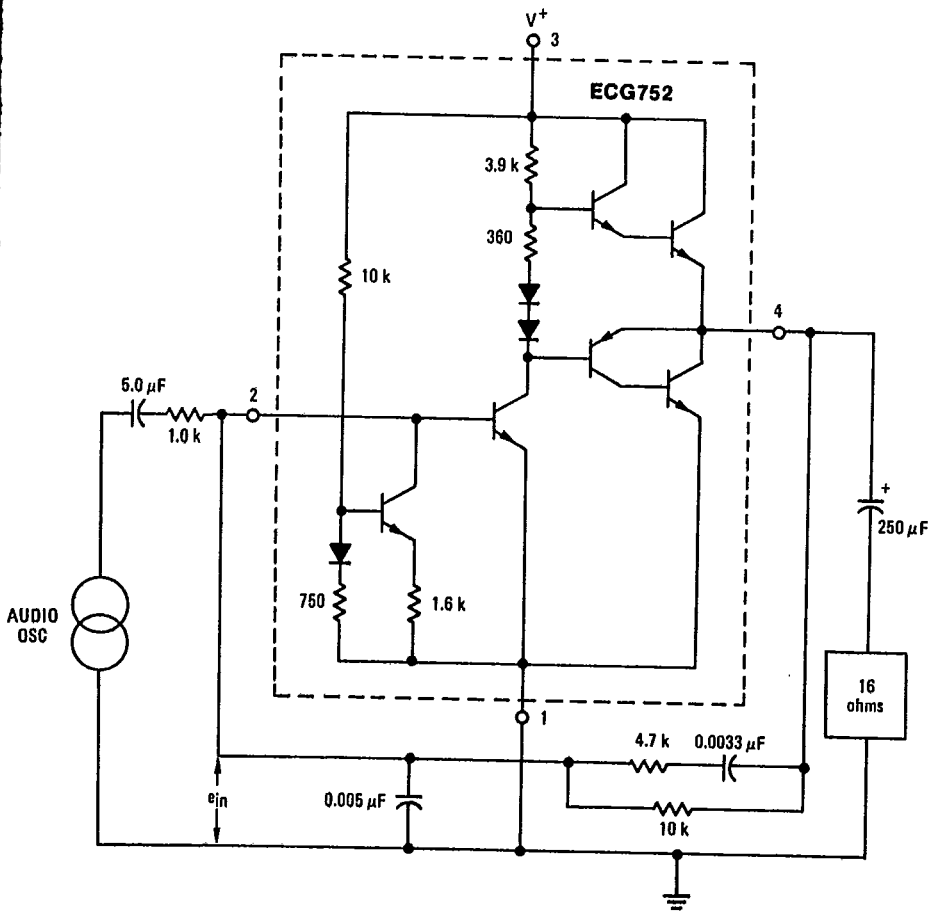
Electrical Characteristics* ($V^+ = 9.0$ Vdc, $R_L = 16$ Ohms, $T_A = 25^\circ$ C unless otherwise noted)

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Characteristic	Symbol	Min	Typ	Max	Unit
Zero Signal Current Drain	I_D	-	3.5	6.0	mAdc
Sensitivity $P_{out} = 50$ mW(rms)	e_{in}	-	-	15	mV(rms)
Output Power Total Harmonic Distortion $\leq 10\%$	P_{out}	250	350	-	mW(rms)
Total Harmonic Distortion $P_{out} = 50$ mW(rms) $P_{out} = 50$ mW(rms), $V^+ = 6.0$ Vdc	THD	-	0.7	-	%
		-	4.5	-	

*As measured in test circuit shown in Figure 1.

Figure 1 - Test Circuit



Total Harmonic Distortion versus Output Power

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Figure 2 - $V^+ = 9.0$ Vdc

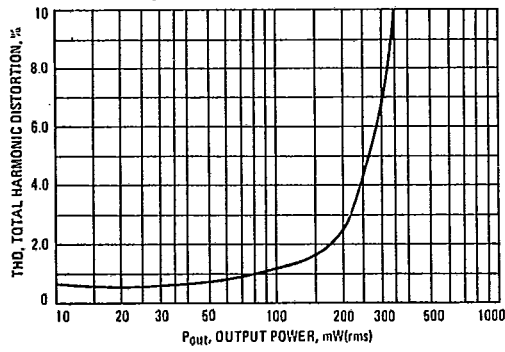


Figure 3 - $V^+ = 6.0$ Vdc

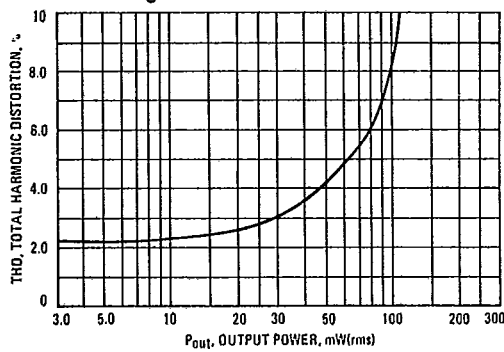


Figure 4 - Current Drain versus Output Power

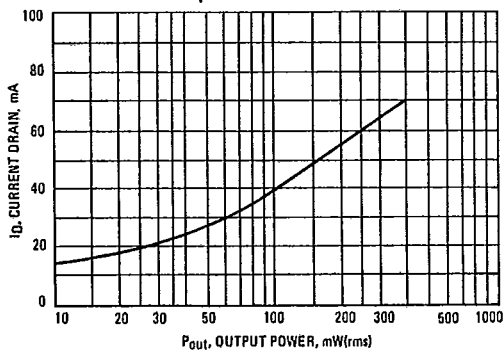
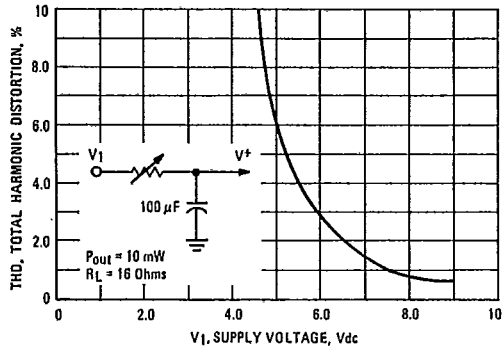


Figure 5 - Total Harmonic Distortion versus Supply Voltage



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Figure 6 - Typical Circuit Application

