

MFC8020A

AUDIO DRIVER

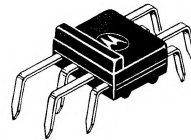
Advance Information

CLASS B AUDIO DRIVER

... designed as a preamplifier and driver circuit for complementary output transistors.

- Drives Up to 15-Watts Output (Four-Ohm Load)
- High Gain – 10 mV Input for Full Output
- High Input Impedance – 1 Meg Ohm Typ
- Output Biasing Diodes Included
- No Special h_{FE} Matching of Outputs Required

CLASS B AUDIO DRIVER Silicon Monolithic Functional Circuit

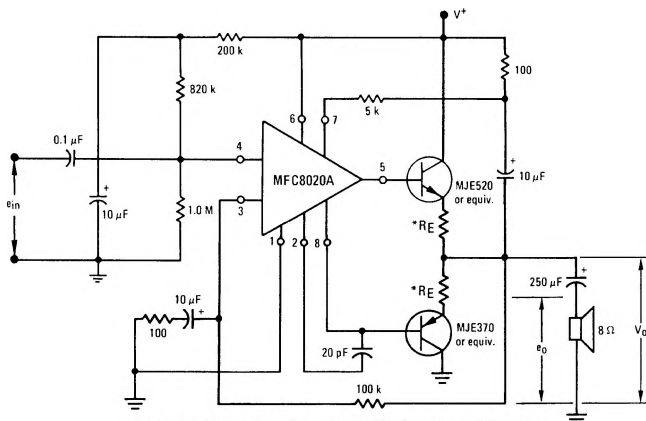


CASE 644A
PLASTIC PACKAGE

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Power Supply Voltage	V^+	35	Vdc
Thermal Resistance Derate above $T_A = +25^\circ\text{C}$	θ_{JA}	100	$^\circ\text{C/Watt}$
Operating Temperature	T_A	-10 to +75	$^\circ\text{C}$

FIGURE 1 – TYPICAL APPLICATION AND TEST CIRCUIT (10-WATT AMPLIFIER)



* R_E may be required for bias stabilization, depending upon output devices, heat sinks and circuit application. All test and measurements shown on this data sheet are for $R_E = 0$.

MFC8020A (continued)

ELECTRICAL CHARACTERISTICS ($T_A = +25^\circ\text{C}$ unless otherwise noted) (See Figure 1)

Characteristic	Symbol	Min	Typ	Max	Unit
Drain Current ($e_{in} = 0, V^+ = 32 \text{ Vdc}$)	I_D	—	10	30	mA
Sensitivity ($f = 1.0 \text{ kHz}, P_O = 10 \text{ W}, e_o = 8.95 \text{ V(rms)}$)	e_{in}	—	—	10	mV
Distortion @ 10 Watts Power Output (e_{in} adjusted to produce 10-Watts output, $e_o = 8.95 \text{ V(rms)}, V^+ = 32 \text{ Vdc}, f = 1.0 \text{ kHz}$)	THD	—	1.0	5.0	%
Quiescent Output Voltage ($V^+ = 32 \text{ Vdc}, e_{in} = 0$)	V_o	15	16	17	Vdc

FIGURE 2 – CIRCUIT SCHEMATIC

