MFC4050

AUDIO DRIVER

Advance Information

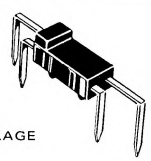
CLASS "A" AUDIO DRIVER

. . . designed for driving Class "A" PNP power output transistor stage applications.

- Drives to 4 Watts of Output Power
- Ideal for 12 Volt Automotive Equipment
- No Gain Selection of Power Transistors Necessary
- Economical 4-Lead Package

CLASS "A" AUDIO DRIVER

Silicon Monolithic
Functional Circuit

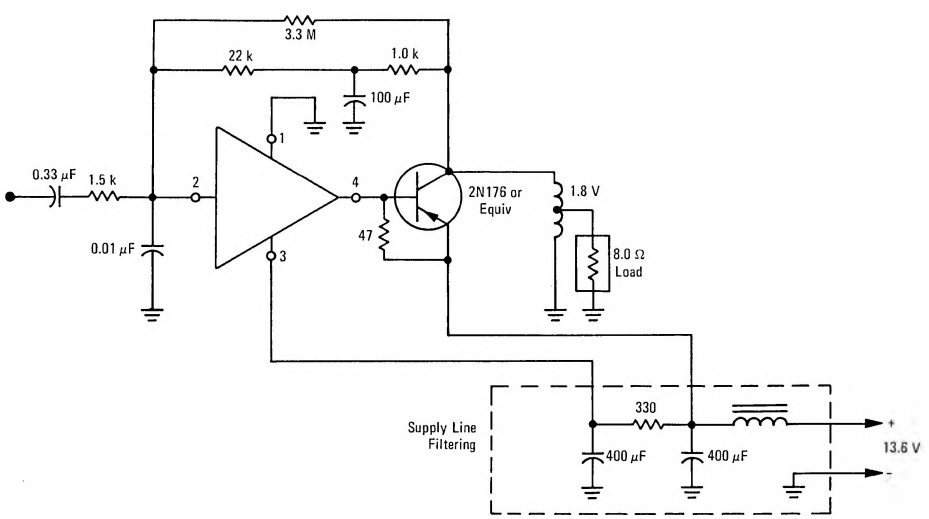


CASE 206A
PLASTIC PACKAGE

MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

Rating	Symbol	Value	Unit
Power Supply Voltage	V^+	18	Vdc
Power Dissipation @ T_A = 25°C (Package Dissipation)	P_D	1.0	Watt
Derate above 25°C	$1/\theta_{JA}$	10	mW/°C
Operating Temperature Range	T_A	-10 to +75	°C

FIGURE 1 – TYPICAL 4-WATT AMPLIFIER CIRCUIT APPLICATION



See Packaging Information Section for outline dimensions.

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

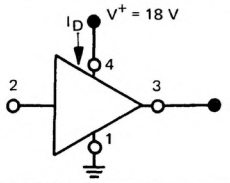
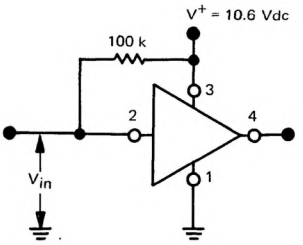
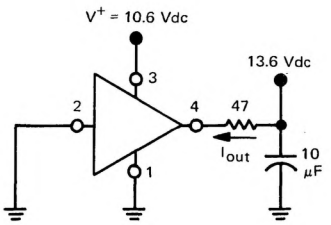
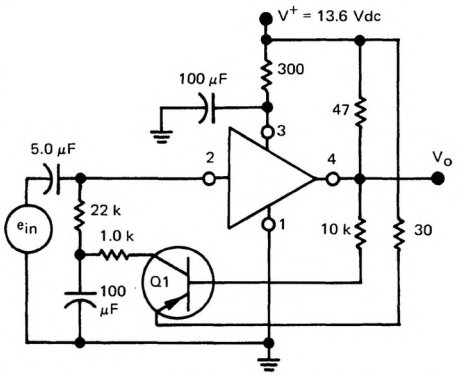
Circuit	Characteristic	Symbol	Min	Max	Unit
	Current Drain No Load	I_D	–	10	mA
	Input Voltage	V_{in}	1.9	2.5	Vdc
	Output Current (e_{in} = 1.0 mV(rms) @ 1.0 kHz)	I_{out}	30	–	mAdc
	Open Loop Voltage Gain (e_{in} = 1.0 mV(rms) @ 1.0 kHz) Q1: MPS6514 or equiv.	A_{VOL}	130	–	V/V

FIGURE 2 – CIRCUIT SCHEMATIC