#### **EVALUATION KIT FOR PA97**



# **EK28**

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#### INTRODUCTION

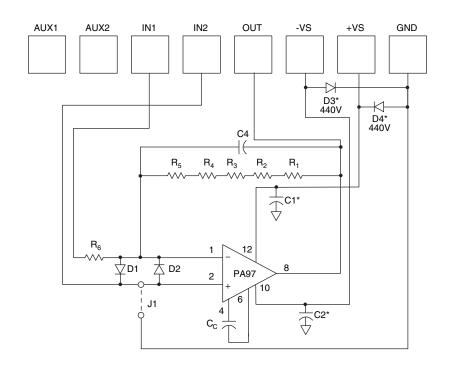
This easy-to-use kit provides a platform for the evaluation of linear power amplifiers circuits using the PA97 pin-out. With ample breadboarding areas it is flexible enough to analyze a multitude of standard or proprietary circuit configurations. Critical connections for power supply bypassing are pre-wired. Components not usually readily available in engineering labs are provided. External connection to the evaluation kit can be made via the terminals at the edge of the circuit board. These terminal pads are suitable for standard banana jacks or direct soldering of wires. The schematic is shown in Figure 1.

## **PARTS LIST**

Part #	Description, Vendor	Quantity
EVAL23	PC Board, Apex	1
P6KE440A	TransZorb, General	2
	Semiconductor (440V)	
CDC01	Capacitor .01µF 1kV,	2
	Sprague 5GAS10	

#### **ASSEMBLY**

- See Figure 1. Insert and solder the TransZorb diodes at D3 and D4 (440V).
- 2. Insert and solder the disc bypass capacitors at C1 and C2.
- 3. Jumper  $R_{\text{LIM}}$  and  $R_{\text{C}}$  Note that heatsink HS28 is not used.
- 4. Add banana jacks as necessary to complete connections to external circuits and power supplies.
- Insert the amplifier into the PCB mounting holes located in the space between the heatsink fins (not used) and solder pins.
- Add other passive components as necessary to complete your circuit.
- Most common configurations will ground the non-inverting pin of the amplifier. J1 is a convenient way to do this if necessary for your application circuit.
- The four holes at the corners of the circuit board are for mounting #6 standoff spacers if desired.
- R1-R5 are multiple feedback resistors in series. Commonly available resistors do not have a breakdown voltage sufficient to stand off the output voltage of the amplifier. Using multiple resistors will divide down the voltage that each resistor must withstand.



# FIGURE 1.

Figure 1 shows the schematic of the evaluation kit's pre-wired connections. Components supplied with the kit are marked with an asterisk (\*). See the amplifier's data sheet for full application information.

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## FIGURE 2. PCB

# TOP SIDE **DANGER HIGH VOLTAGE** HS27 0 0 0 0 000000000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 --@D1¢ 10 3.37 **⊙**⊸ 0 0 0 0 0 0 0 0 0 0 0 0 0 R3 R1 MICROTECHNOLOGY EVAL23 R-A 000 000000000 **COMPONENT & DUT SIDE** 4.65

## **BOTTOM SIDE**

