

Evaluation Kit

APPLICABLE PARTS (SOLD SEPARATELY)

- PA341DF
- PA441DF

INTRODUCTION

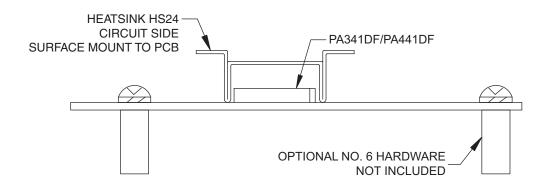
Fast and easy breadboarding of circuits using the PA341DF/PA441DF is possible with the EK13 evaluation kit. The amplifier may be surface mounted directly to the PC board. The PA341DF/PA441DF is soldered to a 2-square inch area of foil on the PC board for heat sinking. This foil heat sink is connected to –Vs. Connections are provided for required power supply bypassing, phase compensation components, and a current limit resistor. A large area for component mounting provides flexibility and makes a multitude of circuit configurations possible.

SPARE SIG SIG HIN OUTPUT SIDE (CIRCUIT SIDE (DUT))

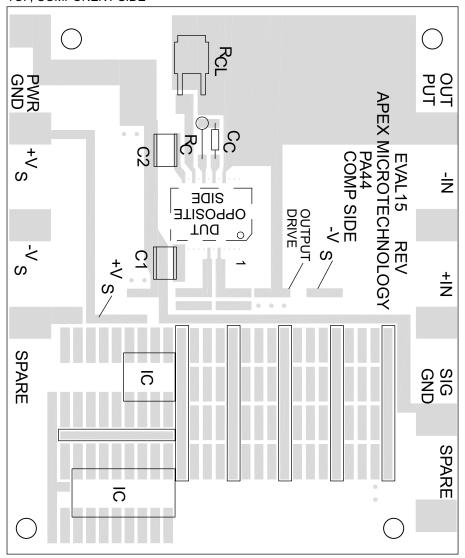
Figure 1: PCB DUT Side



Figure 2: Assembly



TOP, COMPONENT SIDE



2 EK13U Rev H



PARTS LIST

| Reference | Part # | Description | QTY |
|-----------|---------------|-----------------------|-----|
| | EVAL15 | PC Board | 1 |
| C1, C2 | 1825B105K201N | Cap, 1μF, 200V, 10%-R | 2 |
| | HS24 | Heatsink | 1 |

ASSEMBLY

The PA341DF/PA441DF is a surface mount device and should be assembled to the EVAL15 PC board using surface mount processes. Solder paste may be dispensed or screen-printed on the DUT pads. The heat tab on the back of the PA341DF/PA441DF provides maximum heat dissipation capabilities when soldered to the PCB metalization that runs under the DUT on the DUT side of the board. Solder should be applied here also. For prototype purposes, the tab can be thermally connected to the PCB metalization using thermal grease.

The PA341DF/PA441DF and HS24 should be reflowed to the PCB using a solder reflow furnace. If this is not available, a heat plate capable of solder reflow temperatures may be used. or, though time consuming, the leads may be soldered individually to the PCB with a soldering iron. In this case the use of thermal grease under the heat tab is recommended instead of solder for the thermal connection.

CAUTION

High Voltages will be present. Use caution in handling and probing when power is applied.

NEED TECHNICAL HELP? CONTACT APEX SUPPORT!

For all Apex Microtechnology product questions and inquiries, call toll free 800-546-2739 in North America. For inquiries via email, please contact apex.support@apexanalog.com. International customers can also request support by contacting their local Apex Microtechnology Sales Representative. To find the one nearest to you, go to www.apexanalog.com

IMPORTANT NOTICE

Apex Microtechnology, Inc. has made every effort to insure the accuracy of the content contained in this document. However, the information is subject to change without notice and is provided "AS IS" without warranty of any kind (expressed or implied). Apex Microtechnology reserves the right to make changes without further notice to any specifications or products mentioned herein to improve reliability. This document is the property of Apex Microtechnology and by furnishing this information, Apex Microtechnology grants no license, expressed or implied under any patents, mask work rights, copyrights, trademarks, trade secrets or other intellectual property rights. Apex Microtechnology owns the copyrights associated with the information contained herein and gives consent for copies to be made of the information only for use within your organization with respect to Apex Microtechnology integrated circuits or other products of Apex Microtechnology. This consent does not extend to other copying such as copying for general distribution, advertising or promotional purposes, or for creating any work for resale.

APEX MICROTECHNOLOGY PRODUCTS ARE NOT DESIGNED, AUTHORIZED OR WARRANTED TO BE SUITABLE FOR USE IN PRODUCTS USED FOR LIFE SUPPORT, AUTOMOTIVE SAFETY, SECURITY DEVICES, OR OTHER CRITICAL APPLICATIONS. PRODUCTS IN SUCH APPLICATIONS ARE UNDERSTOOD TO BE FULLY AT THE CUSTOMER OR THE CUSTOMER'S RISK.

Apex Microtechnology, Apex and Apex Precision Power are trademarks of Apex Microtechnology, Inc. All other corporate names noted herein may be trademarks of their respective holders.

EK13U Rev H 3