

**POWER AMPLIFIER SUPPORT COMPONENTS** 

# **APPLICATION NOTE PA08**

HTTP://WWW.APEXMICROTECH.COM (800) 546-APEX (800) 546-2739

#### **EVALUATION KIT**

EK09 is an easy to use engineering platform for prototype evaluation. Provided items include: PC boards to make a five sided box, cage jacks and 200V ceramic bypass capacitors. The top board has pads for two TO-3 packages and one MO127 package. Two ends of the box are predrilled for banana jacks and BNC connectors (not supplied). Amplifiers and heatsinks are sold separately.

#### HEATSINKS

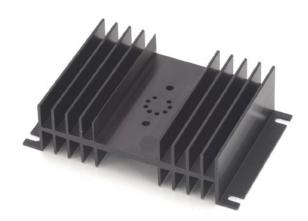
The following heatsinks are mechanically compatible with this amplifier. Thermal ratings are for optimum mounting in free air.



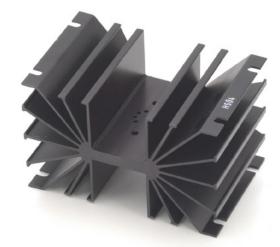
HS01 11.6°C/W



HS02 4.5°C/W



HS03 1.7°C/W







HS05 0.85°C/W



HS09 11.7°C/W



### HS11 0.68°C/W

With liquid cooling the HS11 thermal rating can be reduced to .1°C/W.



HS13 1.48°C/W

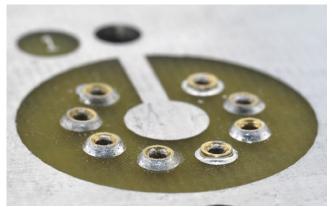


#### HS14 2°C/W

## **CAGE JACKS**

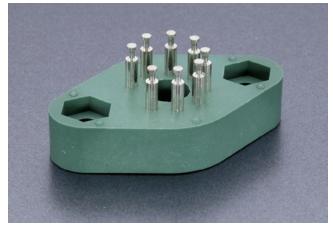


**MS02** 

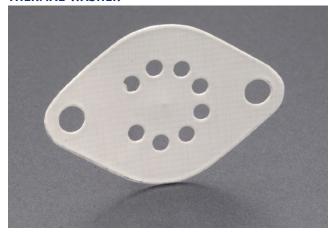


Part number MS02 consists of a package of 8 cage jacks. These are mounted directly in a print circuit board. Use a spacer between the PCB and the heatsink to avoid short circuits.

## SOCKET



## **MS03 THERMAL WASHER**



**TW03** 

## NOTES:

- 1. Base material is aluminum, 0.002" thick. Do not allow the washer to touch pins of the amplifier.
- 2. For optimum thermal transfer, avoid abrasive handling of washers which can damage their 0.5mil thick layer of thermal compound with which each side is coated.
- 3. The dry thermal compound will flow filling header to heatsink voids as soon as the material reached 60°C.
- 4. Do not store unused thermal washers above 40°C.
- 5. A new washer must be used for each mounting.
- 6. Part number TW03 consists of a package of 10 washers.
- 7. Thermal resistance is 0.1°C/W.