

# APPLICATION NOTE PA241

## EVALUATION KIT

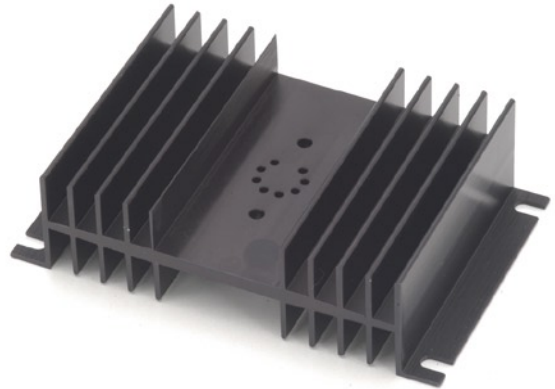
EK09 is an easy to use engineering platform for prototype evaluation of the PA241CE. Provided items include: PC boards to make a five sided box, cage jacks and 200V ceramic bypass capacitors. The top board has pads for two TO-3 packages and one MO127 package. Two ends of the box are predrilled for banana jacks and BNC connectors (not supplied). Amplifiers and heatsinks are sold separately.

EK42 is an easy to use PC board platform for prototype evaluation of the PA241DW. Amplifiers are sold separately.

EK13 is an easy to use engineering platform for prototype evaluation of the PA241DF surface mount package. Provided items include: PC board, ceramic bypass capacitor, surface mount heatsink rated at 20°C/W. Amplifiers are sold separately.

## HEATSINKS FOR THE CE (TO-3) PACKAGE

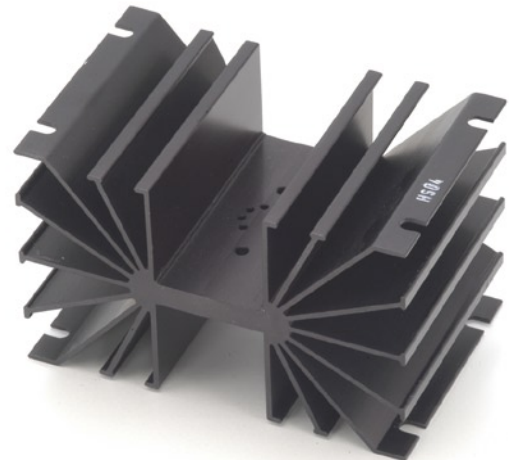
The following heatsinks are mechanically compatible with the PA241CE in the TO-3 package. Thermal ratings are for optimum mounting in free air.



HS03 1.7°C/W



HS01 11.6°C/W



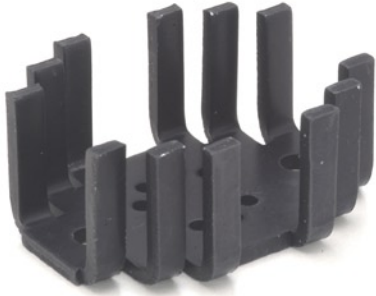
HS04 0.95°C/W



HS02 4.5°C/W



HS05 0.85°C/W



**HS09 11.7°C/W**



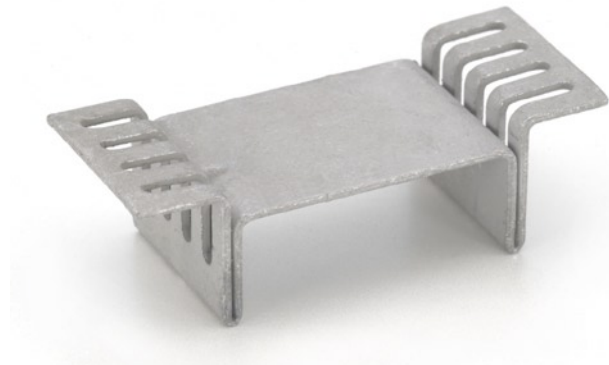
**HS14 2°C/W**

**HEATSINK FOR THE DF (24 PIN PSOP) PACKAGE**



**HS11 0.68°C/W**

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



**HS24**

The HS24 is mechanically compatible with the PA241DF in the PSOP surface mount package. The free-air thermal rating is 20°C/W

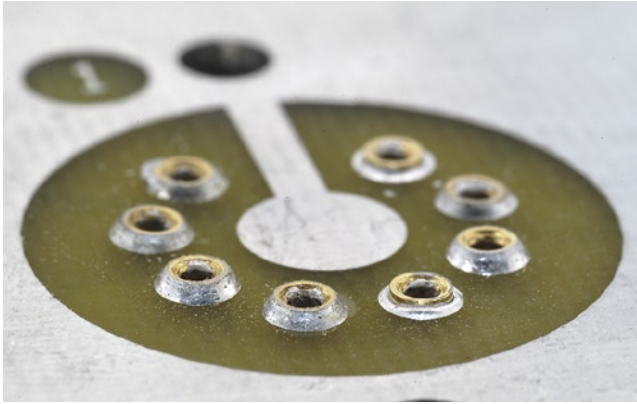
**CAGE JACKS FOR THE CE (TO-3) PACKAGE**



**HS13 1.48°C/W**

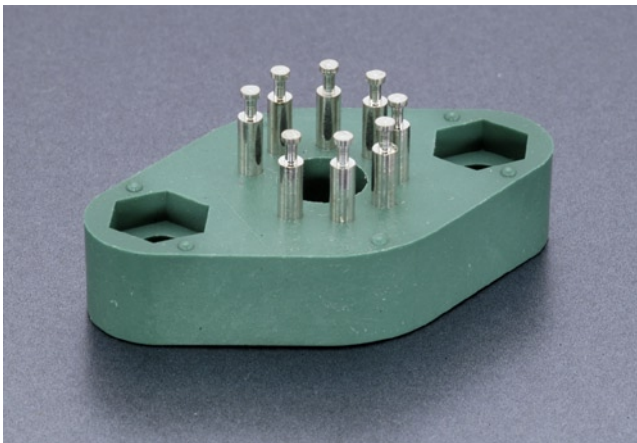


**MS02**



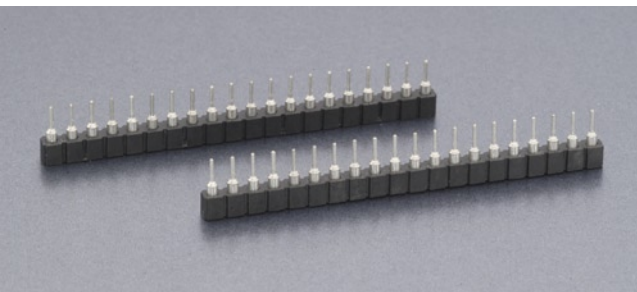
Part number MS02 consists of a package of 8 cage jacks. These are mounted directly in a print circuit board. Use a spacer between the PCB and the heatsink to avoid short circuits.

### SOCKET FOR THE CE (TO-3) PACKAGE



MS03

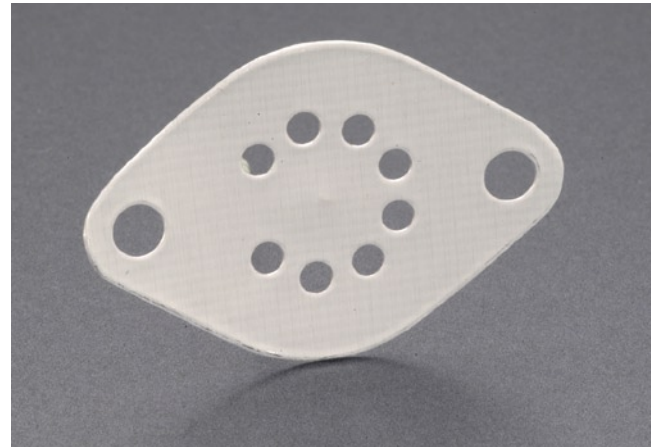
### SOCKET FOR THE DW (10 PIN SIP) PACKAGE



MS06

Part number MS06 consists of two strips of 20 connectors on 0.1" centers. The strip can easily be cut to desired length.

### THERMAL WASHER FOR THE CE (TO-3) PACKAGE



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 61°C.
4. Do not store unused thermal washers above 45°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.