

# redpoint

## CHIPSINKS

### C Series – Heatsinks for VLSI (patents pending)

#### Features

- Suitable for sockets or chip carrier packages.
- High thermal performance.
- Omnidirection orientation.
- Low height.

#### Description

The Redpoint C series aluminium heatsinks (Chipsinks) provide a compact solution for cooling VLSI mounted in Jedec A&D leadless chip carrier packages, leaded quad packages and in most leadless chip carrier sockets.

The Chipsink toroidal heat exchange surface provides low thermal resistance ( $\theta$ ) performance in mild forced convection, as deployed in compact electronic equipment, by creating high air turbulence but with little hindrance to airflow.

Chipsinks are equally effective when mounted horizontally or vertically and are largely unaffected by airflow direction. The basic design concept is extendable to any pin density.

For Jedec A&D leadless chip carriers and leaded quad packages a type CP plain base Chipsink is available. Type CP Chipsinks are normally attached by a recommended cyanoacrylate or epoxy adhesive.

For proprietary LCC sockets incorporating a heatsink lid it is intended that where possible the Chipsink offers a direct substitution for the lid and is retained by the socket clamping arrangement provided. Adhesives are not necessary.

#### TYPE CP68

A plain base, 18mm square, Chipsink suitable for Jedec A&D 68 and 132 pin LCC packages or 68 leaded quad packages. Adhesive required.



CP68



CT68

#### TYPE CT68

A Chipsink for the Textool/3M 68 pin chip carrier socket (No. 268-5400-00) directly replacing the socket heatsink lid. The Chipsink plate has the same footprint as the socket heatsink lid. No adhesives necessary.

Thermal Performance. Types CP68 and CT68.

9.3°C/W in 1.4 m/s airflow

Height including base plate 9.3mm

Finish – Matt black paint is standard

– Gold and other colours available.

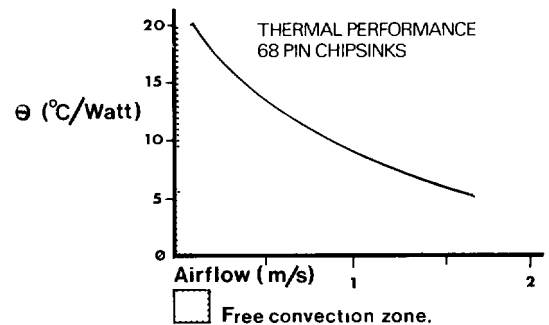
#### ORDERING INFORMATION (JANUARY 1984)

Chipsinks available from stock: CP68, CT68

To Order: CP Series – Types CP52, CP44, CP28/24

Available shortly: Versions for other LCC sockets.

Footnote: The same coil design concept is applied to a range of Redpoint Dipsinks for 40 and 64 pin DIPS offering similar features.



## TV215 Powerfin with solderable tabs (illustrated)

### TV265 Powerfin with solderable tabs

Provides ability to flow solder heatsink to P.C.B.

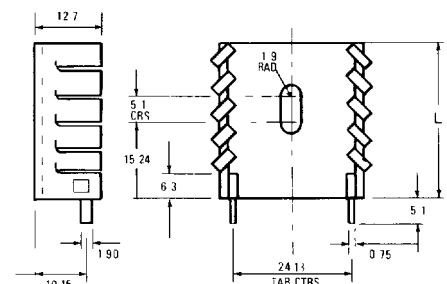
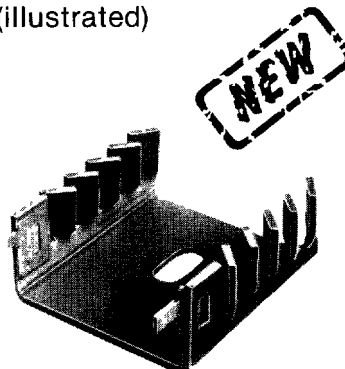
The design features rugged stake-on solderable tabs.

Mounting slot suitable for wide range of devices.  
TO126, TO220, etc.

TV215 'L' = 30.2 Thermal rating  $\theta$  = 14° c/w

TV265 'L' = 45.0 Thermal rating  $\theta$  = 12.3° c/w

Finish: Black anodised body with solder coated tabs.



## HF - Series Heatsink Clips

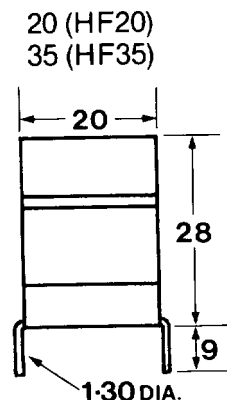
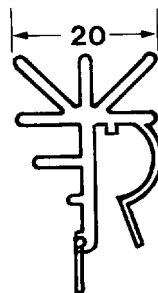
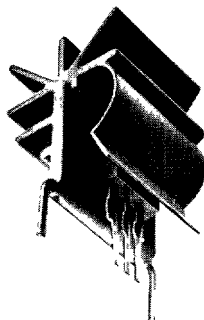
Versatile and powerful extruded clip heatsink for TO 126, TO 202, TO 220 and TO 218 devices. Incorporates tinned wire leads for soldering into P.C.B.

### HF 20 (Illustrated)

Thermal rating:  $13.3^{\circ}\text{C/W}$

### HF 35

Thermal rating:  $11^{\circ}\text{C/W}$



Finish: Black anodised with tinned wire leads.

HF 20 at 20 mm length and HF 35 at 35 mm length are standard. Other lengths can be manufactured on request to suit multi device mounting and for SOT 1318, SOT 141 and TDA 1037 packages.

## New Dipsink pattern

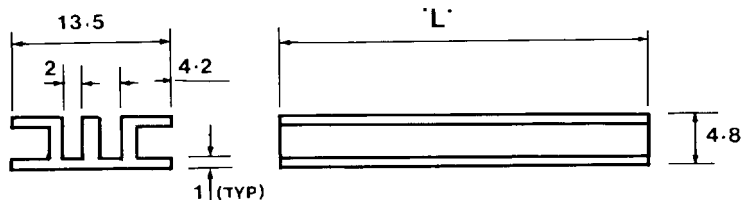
### DIP 1495 series

Low profile - less than 5 mm.

Heatsinks for 24, 28, 40, 48 and

64 pin D.I.L. integrated circuit packages.

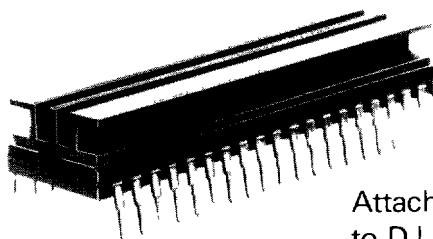
The flat top fins allow for device labelling and the section provides excellent thermal performance almost regardless of orientation.



Finish: Black anodised.

All dimensions in mm.

Pattern No.	Length	Device	$\theta^{\circ}\text{C/W}$
DIP 1495	30.5	24 pin	25
DIP 1496	36.6	28 pin	23
DIP 1497	50.8	40 pin	20
DIP 1498	61.0	48 pin	18
DIP 1499	81.3	64 pin	17

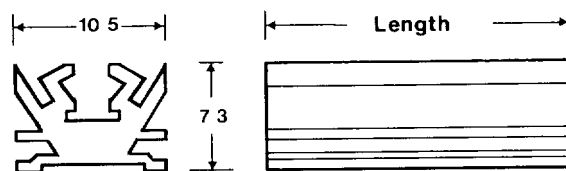


Attach by adhesive to D.I.L. package before or after board assembly.

## New length versions of 'DIP 1490' profile

Bond-on heatsinks for 8 pin and 20 pin D.I.L. packages

Pattern No.	Length	Device	$\theta^{\circ}\text{C/W}$
DIP 1488	25.0	20 pin	29
DIP 1489	10.0	8 pin	70



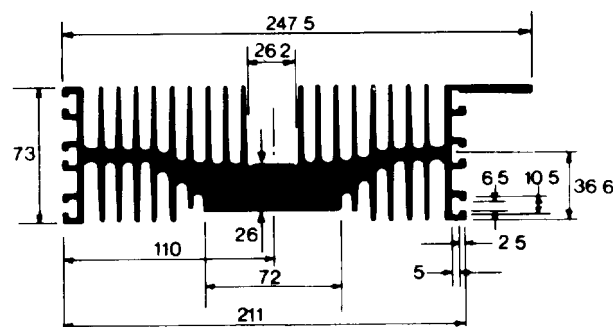
Finish: Black anodised.

## Z-Type Powersink

A versatile heatsink for pressure mounted, stud mounted and other semi conductor devices. The heatsink features multiple bolt slots and a flange for fixing and adaption purposes. Custom machining for this and other Redpoint heatsinks available on request. Stock lengths as below.

Other lengths available.

Model	Length(mm)	$\theta^{\circ}\text{C/W}$
6Z-1	152.4	54
8Z-1	203.2	47
10Z-1	254.0	44
12Z-1	304.8	42



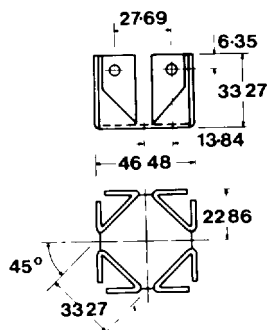
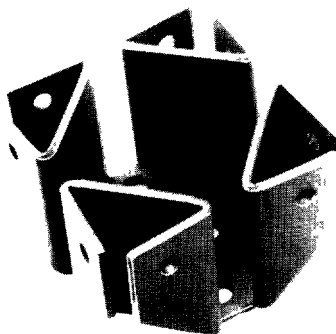
Finish: Black anodised. Alternative conductive phosphate finishes available.

## High Power Dissipation Heatsinks

### PF 690 Series

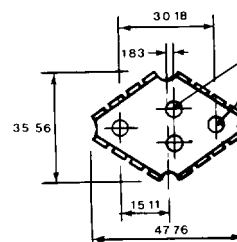
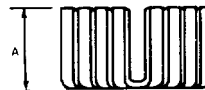
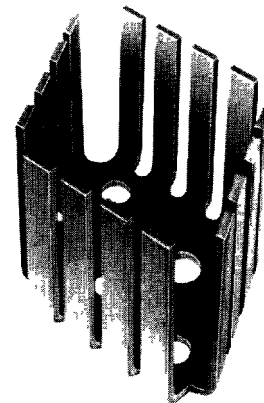
Finish: Black anodised.  
Thermal rating:  $5^{\circ}\text{C/W}$

PF 690 for TO3  
PF 691 for TO3 (4 pin)  
PF 692 for 2 x TO220



### PFO13 Series

Efficient space saving  
heatsinks in tight  
situations for TO3  
devices.



Model	Dim'A'(mm)	$\theta^{\circ}\text{C/W}$
PFO13	12.7	9
PFO15	25.4	5.2
PFO16	31.75	4.8

Finish: Black anodised.

### PF745

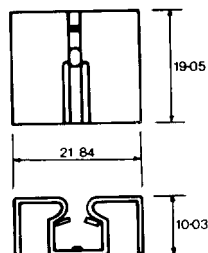
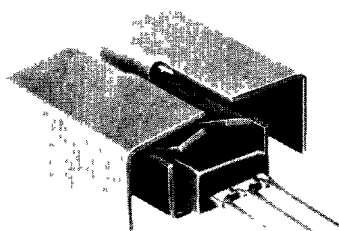
Low cost clip-on heatsink for TO220 devices

Easy to use – simply insert the TO220 package into the clip as far as the dimple. The device is then retained with pressure applied directly above the device junction providing optimum case to heatsink thermal transfer.

Effective in either horizontal or vertical position.  
Horizontal is normal.

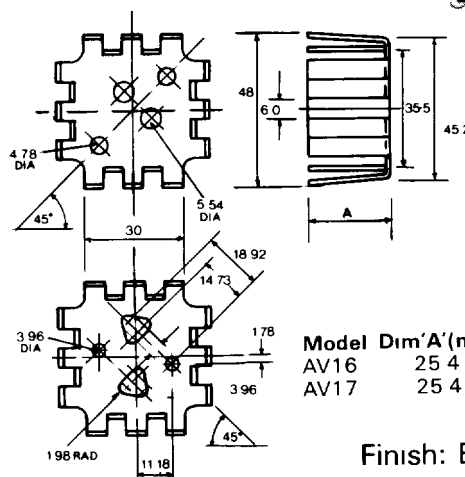
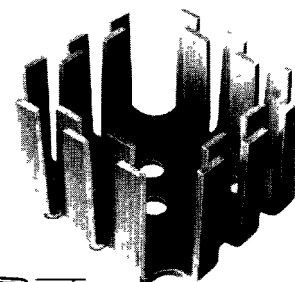
Thermal rating:  $23.3^{\circ}\text{C/W}$

Finish: Black anodised.



### A.V. Series

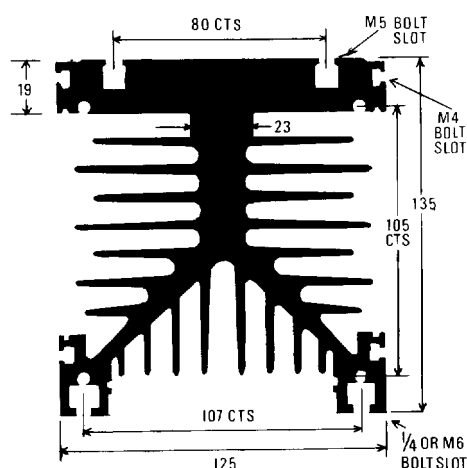
4 sided heatsink with  
alternate sloping  
vanes designed for  
maximum retained  
dissipation surface  
and low unit cost.



Model	Dim'A'(mm)	Holes	$\theta^{\circ}\text{C/W}$
AV16	25.4	TO3	5.8
AV17	25.4	TO220	5.8

Finish: Black anodised.

### D Type Powersink



Finish: Black anodised.

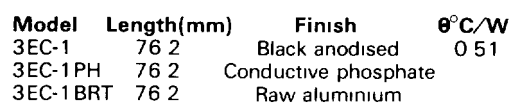
Pattern No.	Length ins	mm	Thermal rating $\theta^{\circ}\text{C/W}$
4D-1	4	101.6	0.51
6D-1	6	152.4	0.37
9D-1	9	228.6	0.27

Features extruded tee-slots for mounting  
80mm power modules and solid state  
relays. Stud devices may also be mounted.

Cover slides on 3 sides may be easily  
provided. Top surface is machined flat.

23mm stem can be drilled and tapped for stud  
devices up to M20. For fan cooled units  
using the D Type – see 400 Series.

At 19 inches in width, this single-sided heatsink finds ready application within standard racking and case systems. It is available cut to custom length and with the choice of black anodised or conductive phosphate finishes. Any hole complement is readily available.



\*Width matches panels to I.E.C. (2nd ed.), and DIN41494.

Finish: Black anodised.  
Other lengths available to order.

Pattern No	Length		Thermal Rating $\theta^{\circ}$ c/w
	ins	mm	
3ED-1	3	76.2	1.41
6ED-1	6	152.4	1.00
9ED-1	9	228.6	0.74
3EE-1	3	76.2	0.65
4EE-1	4	101.6	0.50
6EE-1	6	152.4	0.38
9EE-1	9	228.6	0.33
3EF-1	3	76.2	0.44
4EF-1	4	101.6	0.40
6EF-1	6	152.4	0.34
9EF-1	9	228.6	0.28