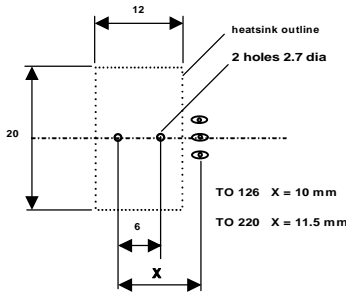


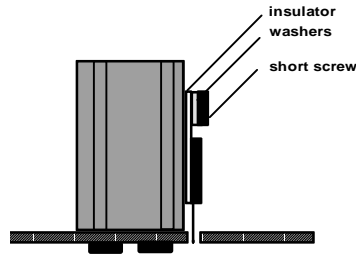
## DS 22 heatsink Application Note AN-DS

1. DS 22 heatsink perpendicular to board (free air heatsink). Suitable for TO 220 , TO 126 or similar. Temperature rise over ambient is 21 C/W. Use TO 220 mounting kit or TO 126 mounting kit and short screw + washer from fitting kit FK-DS to affix transistor. Use long screws to affix heatsink to pcb. Put heat transfer compound between the transistor and the heatsink



**Footprint**

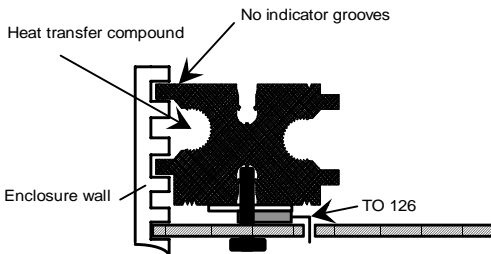
**Fig.1**



**Side elevation**

2. DS 22 heatsink aligned with edge of circuit board to connect with extruded enclosure. DS 22 heatsink has four possible orientations to cater for any thickness of transistor or regulator. Screws must be correct length and spaced with washers if required.

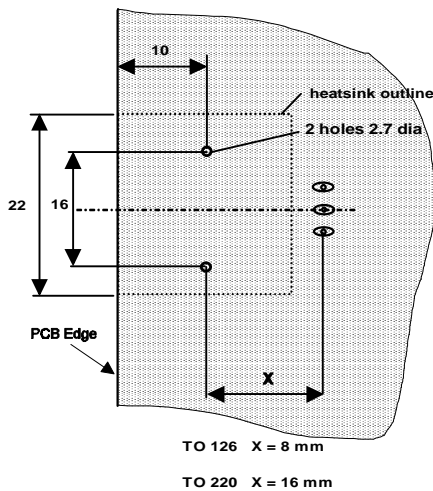
**Fig.2 Side Elevation**



Example 1: Two indicator grooves next to edge of board. Suitable for TO 220, D<sup>2</sup>PAK and other 4.5mm thick devices - use long screws in fitting kit FK-DS.

Example 2: No indicator grooves next to edge of board. Suitable for TO 126 (see Fig.2), DPAK and other 2.5mm devices. - use short screws.

For TO 220/ TO 126 arrange circuit board layout as shown in Fig.3. Solder transistor *prior* to mounting heatsink and orientate as illustrated in Fig.2. Apply heat transfer compound between the



**Fig.3 Footprint**

transistor and the heatsink. The heatsink is anodized and therefore insulated. No insulating kit is required if the transistor does not touch the screws or the enclosure and potential difference is less than 30 volts. A visual check is required to ensure that both screws are tightened up the same amount and that the heatsink is parallel to the board. Misalignment will make it difficult to mount the board in an extruded enclosure. When the circuit board is mounted the fins on the DS 22 heatsink slide into pcb slots on the inside of the enclosure. An aperture is formed between the DS 22 heatsink and the wall of the extrusion. This *must* be filled using heat transfer compound from a syringe. Temperature rise over ambient is 6.5 C/W.

Fitting kit FK-DS contains 2 of each of the following: M2.5 x 8mm, M2.5 x 10mm threadforming screws, 1mm thick plastic washer.