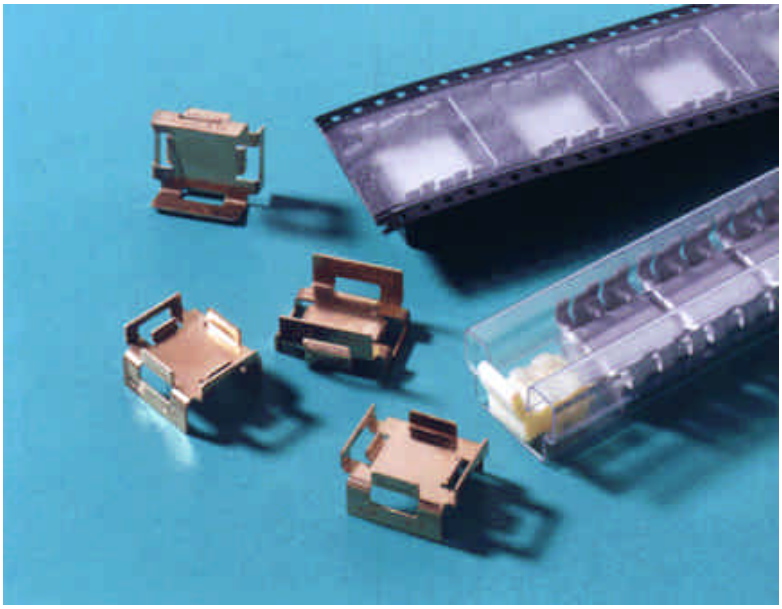
Wakefield Engineering

Series 217 Surface Mount Heat Sinks for D²Pak, TO-220, SOT-223, & SOL-20

Compatible with surface mount technology (SMT) automated production techniques for ease of assembly and a variety of soldering methods, these heat sinks allow greater packaging densities and reduction in PC-board area, increasing the power dissipation of surface mount devices (SMDs) while maintaining and improving manufacturers' component thermal specifications.

The Series 217 is the enhanced version and the direct replacement of the Series 216. It is ideal for a variety of applications including instrumentation, computer, automotive, communications, power conversion and many others.



Features and Benefits:

- **Surface-mounted and does not contact the device**
- **No interface material is needed**
- **Copper with tin-lead plating for improved solderability and assembly**
- **Compact, light weight and low cost**
- **Both the component and the heat sink are installed on the PC-board utilizing standard SMT assembly equipment for "Tape & Reel" and "Tube" formats**
- **EIA standards and ESD protection are specified**
- **Can be used with water soluble or no clean SMT solder creams or other pastes**

Thermal Performance

217 Heat Sink with DDPAK Device

The graph shows the device tab temperature rise in the system operation, both by itself and with a heat sink. The device is mounted horizontally, as shown in the sketch. The system includes a printed circuit board (PCB). Natural convection results include thermal radiation to a surface at ambient temperature.

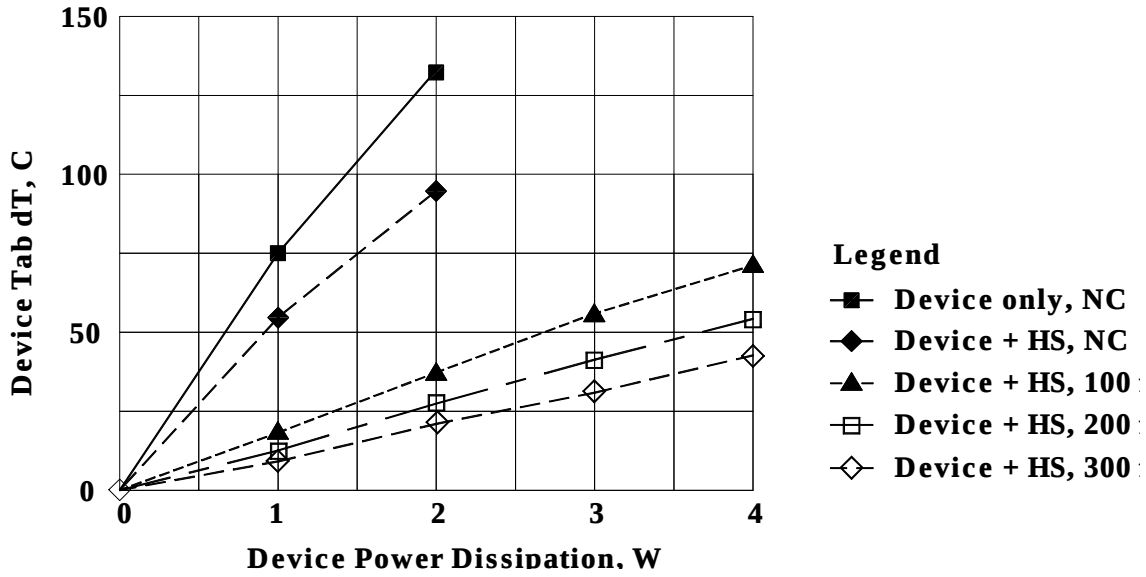
The heat sink is surface-mounted and does not contact the device. No interface material is needed.

These performance estimates come from a combination of Flotherm™ modeling and experimental data. Typical correlation between the two methods in within 10%.

Approach Velocity	Device tab thermal resistance to ambient, C/W	
ft/min	Device only	w/217 heat sink
100	26	19
200	17	13
300	14	11

Flotherm ™ library and AutoCAD ™ files of both the devices and the heat sinks are available on request. Contact

217 Heat Sink with DDPAK



Product Specification