PowerPeg™ Thermal Management

PowerPeg™ is an OEM Thermal Connector for integration with surface mount printed circuit board assemblies. The general purpose, solid copper alloy construction provides high thermal conductivity, making PowerPeg an excellent alternative to thermal vias. Gold plating provides protection from oxidation as well as increased solder ability.

The PowerPeg advantage is its versatility. Interchangeable parts allow the designer many possibilities. In most cases, implementing the ultimate Thermal Management system in your design is as easy as click and drag.

Power peg is designed with manufacturing ease in mind. The thermal connector is inserted through a hole in the PCB directly beneath the component. The shoulder precisely limits the insertion depth, ensuring proper positioning of the component above. PowerPeg is available in Tape and Reel packaging for easy integration with industry standard assembly systems. Patent Pending.

The table below provides a comparison of three alternative thermal management systems.

For more information please visit http://www.thermalconnectors.com.

System Platform	Manufacturer	Interconnecting Member	Interconnecting Member Resistance	Dissipater	Dissipater Resistance	Overall System Resistance
PowerPeg™	TEM Products	PowerPeg™	1° C/watt	VHS-95 Heat Sink	4.7 °C/watt Source # 2	**5.7 °C/watt**
D series	Ohmite	PCB Layers	9 °C/watt Source # 5	D series SMT Heat Sink	14°C/watt Source # 3	**23 °C/watt**
Thermal Via	PCB Manufacturer	PCB Layers	cumulative	PCB surface	43°C/watt Source # 1	**43°C/watt**
MCPCB	PCB Manufacturer	Metallic substrate	1.5 °C/watt	VHS-95 Heat Sink	4.7 °C/watt Source # 4	**6.2°C/watt**

Sources:

1. Texas Instruments DRV8811 datasheet, Figure 7
2. CUI Inc. VHS-95 heat sink datasheet
3. Ohmite Mfg. Co. D Series datasheet
4. Quadica Developments Inc. SR-08 datasheet
5. Annex A – Calculations dual layer, 2 Oz. PCB layer resistance when used with Ohmite D series Heatsink