Fast Facts

TJC – Thermal Jumper Chip

TJC is designed to provide a thermally conductive pathway with electrical isolation. It may be used as a thermal management solution for cooling PCB hotspot areas.

TJC is made from aluminium nitride, which has around 5 times the thermal conductivity of alumina. As well as providing electrical isolation, it also has a greater thermal conductivity than the equivalent footprint of 70µ copper, and so gives a better thermal connection than an uninterrupted trace.

Market Segments

- Aerospace
- Medical
- Industrial

Applications

- Power supplies
- Power amplifiers
- RF amplifiers
- Laser diode cooling

Features

- High thermal conductivity
- Electrically isolated
- Aluminium nitride (AlN) ceramic chips
- Compact thermal management
- Low capacitance

Benefits

- Low thermal resistance keeps electronic assembly cooler and therefore enhances product reliability.
- Compact design minimises PCB area and total assembly size.
- Low mass reduces product weight.

Our Advantage

For circuit designers who need to manage temperature rise in compact power electronic assemblies we provide TJC which provides a wider size range the competing parts as demonstrated in Appendix 1.

Fast Facts

Appendix 1 Competitor Cross Reference

TT Electronics is the only major resistor manufacturer offering this product. There are two specialist suppliers and the ranges offered are compared below.

TTE	IMS	Res-Netmicrowave
TJC0603	BGC0603	RTC0603
TJC0505	BGC0505	RTC0505
TJC0805	BGC0805	RTC0805
TJC0508		
TJC1206	BGC1206	RTC1206
TJC0612		
TJC2010	BGC2010	
TJC1020	BGC1020	RTC1020
TJC2512	BGC2512	
TJC1225		

Appendix 2 Search Keywords

heatsink	thermal jumper	thermal link
high power	aluminum nitride	thermal management