

THERMAL BRIDGE TECHNOLOGY: SUPERIOR THERMAL RESISTANCE FOR MAXIMUM SYSTEM UPTIME



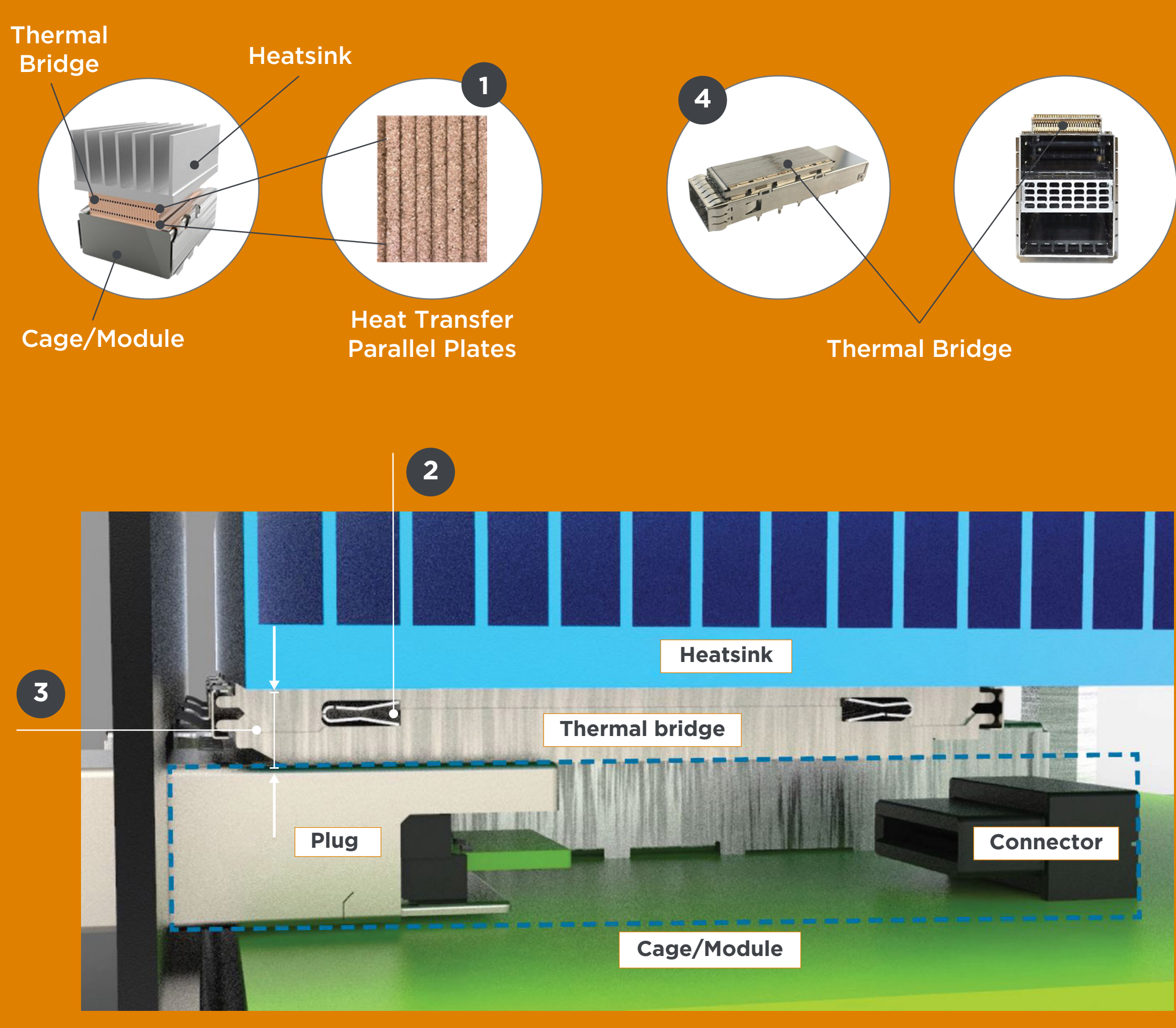
Today's data communication applications have increasingly demanding system power requirements — which often require better ways to dissipate heat. Traditional thermal management approaches such as riding heatsinks don't always provide the optimum solution for applications with restricted airflow, liquid cooling or cold-plates. But what if there was a new way to approach this problem?

TE's new innovative thermal bridge technology provides up to 2x better thermal resistance over traditional thermal technologies such as gap pads or thermal pads. This solution was developed to dissipate more heat associated with increasing system power requirements, specifically in fixed cooling applications with restricted airflow, liquid cooling or cold plates.

01

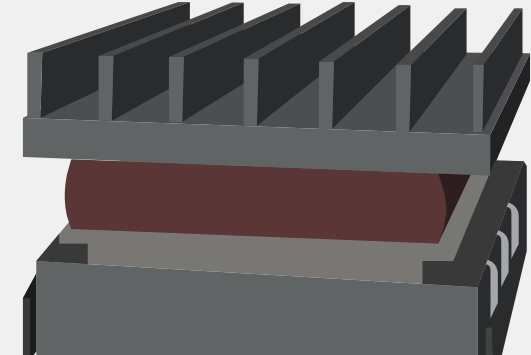
HOW THERMAL BRIDGE WORKS

1. An interleaved series of highly parallel plates allows heat to pass from the I/O module to the cooling area
2. Integrated mechanical springs provide interface force and 1.0 mm of compression travel
3. Near-zero plate gap for compressibility and thermal transfer
4. Pre-assembled on I/O cage

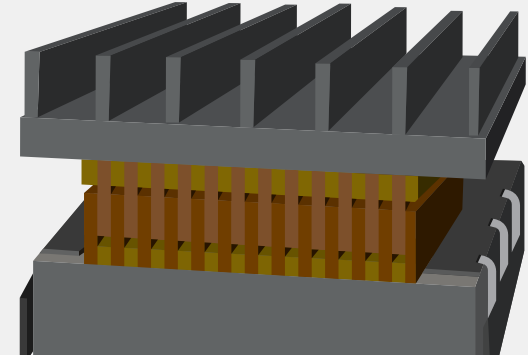


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THERMAL BRIDGE VS. THERMAL PAD



Thermal Pad



Thermal Bridge

VS

Requires tight tolerances and compression in order to achieve thermal performance

Provides 1mm of compression travel to absorb tolerance stack up, with integrated springs to eliminate the need for external compression hardware

Material thickness affected by each compression cycle

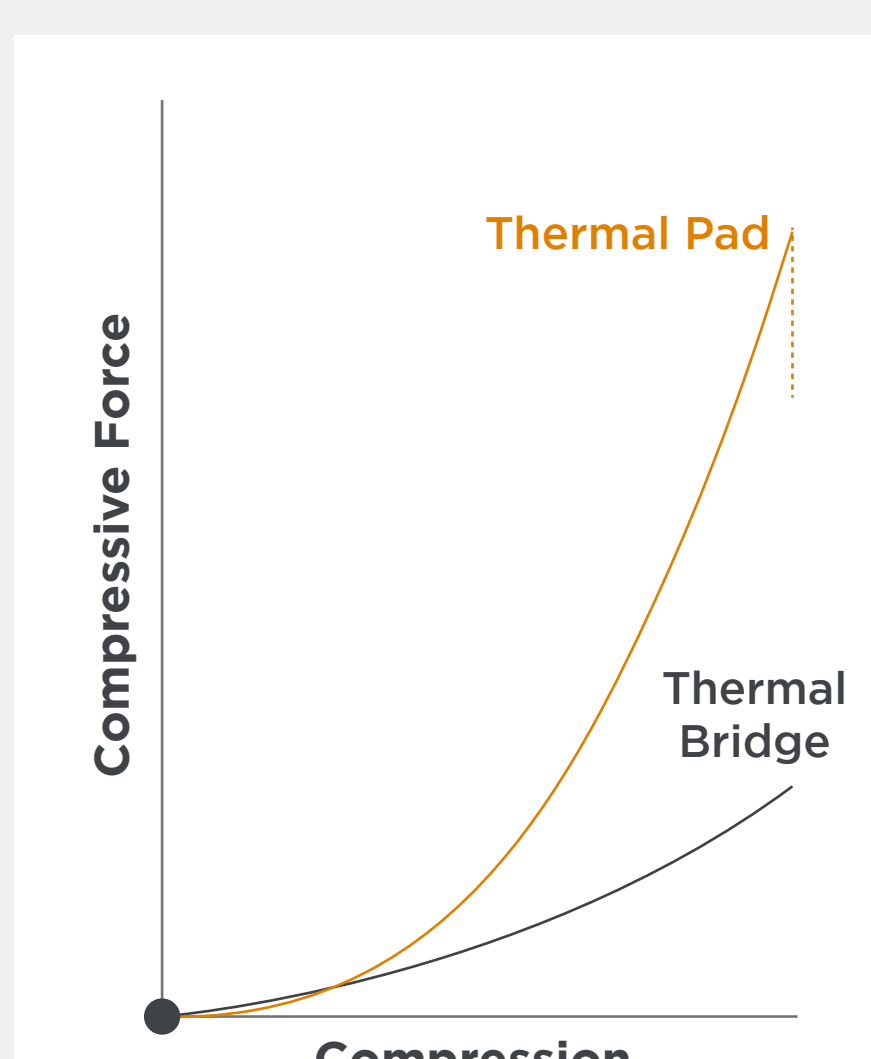
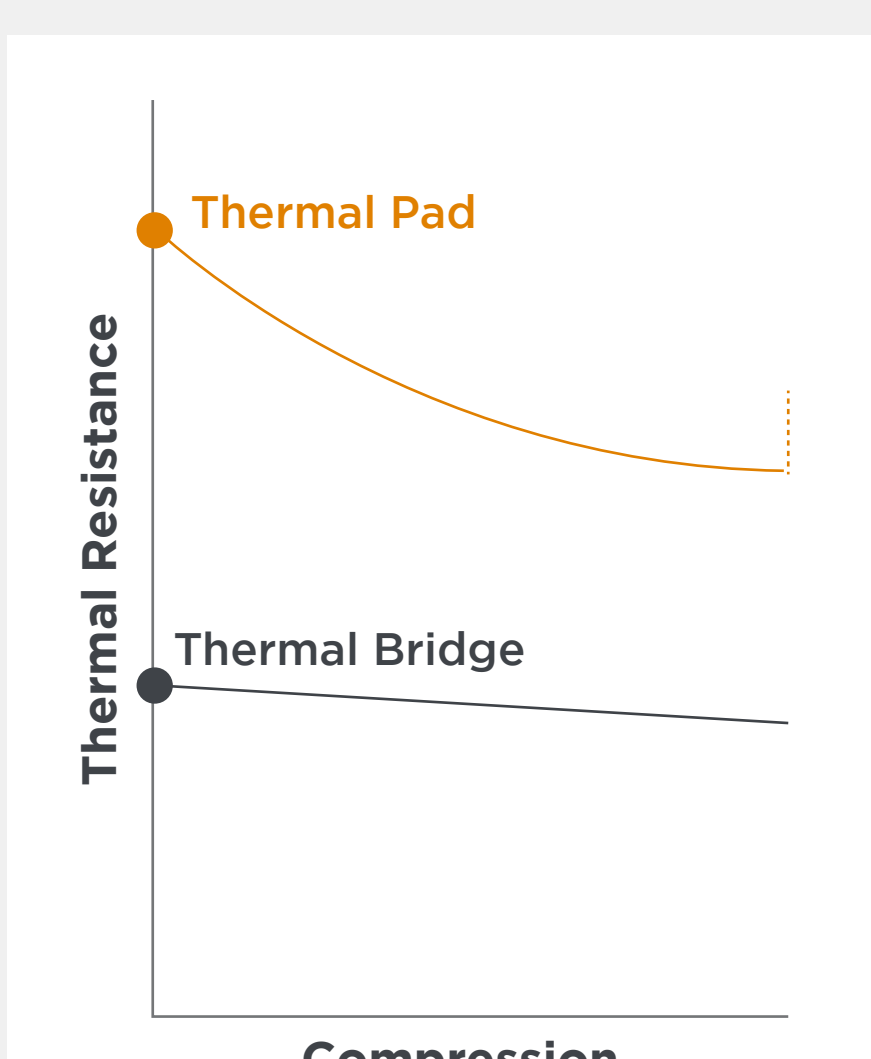
Elastic compression is resistant to set and relaxation over time

Requires additional components to prevent wear

Pre-assembled on cage

One-time usage - requires replacement

Reusable - no replacement required



03

FEATURES & BENEFITS

Key Features

Benefits

2x better thermal resistance

Better reliability and durability

Improved application serviceability



Near-zero plate gap in the thermal bridge construction for optimized compression and thermal transfer



Optimized for applications using cold plates with liquid cooling or heat pipes, ganged heatsinks or direct chassis conduction applications with little to no airflow



Elastic compression design that is resistant to set and relaxation over time



Low and consistent compression force between cold plate and I/O plug

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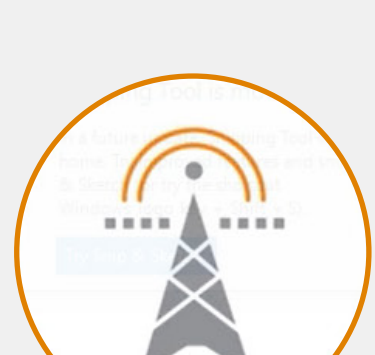
APPLICATIONS



High Performance Computing (HPC)



Ethernet Switches



5G/Wireless



Servers



Ethernet SP Routing