



**MULTI-LAYER THERMAL HEATSHIELD**



## GENERAL DESCRIPTION

An ultra-high performance, tri-layer thermal and acoustical heatshield

## PRODUCT HIGHLIGHTS

- Provides significant temperature drop across the shield when facing extreme temperatures
- Does not ring or resonate, providing acoustical damping of engine and exhaust noise
- Flexible design and manufacturing process enables meeting customer's specific thermal needs
- Durable and resistant to automotive environments

## APPLICATIONS

Typical automotive applications include exhaust manifolds, downpipes, catalytic converters, turbochargers, turbo outlet pipes, exhaust cross-over/cross-under pipes, mufflers, resonators, x-pipes and y-pipes.

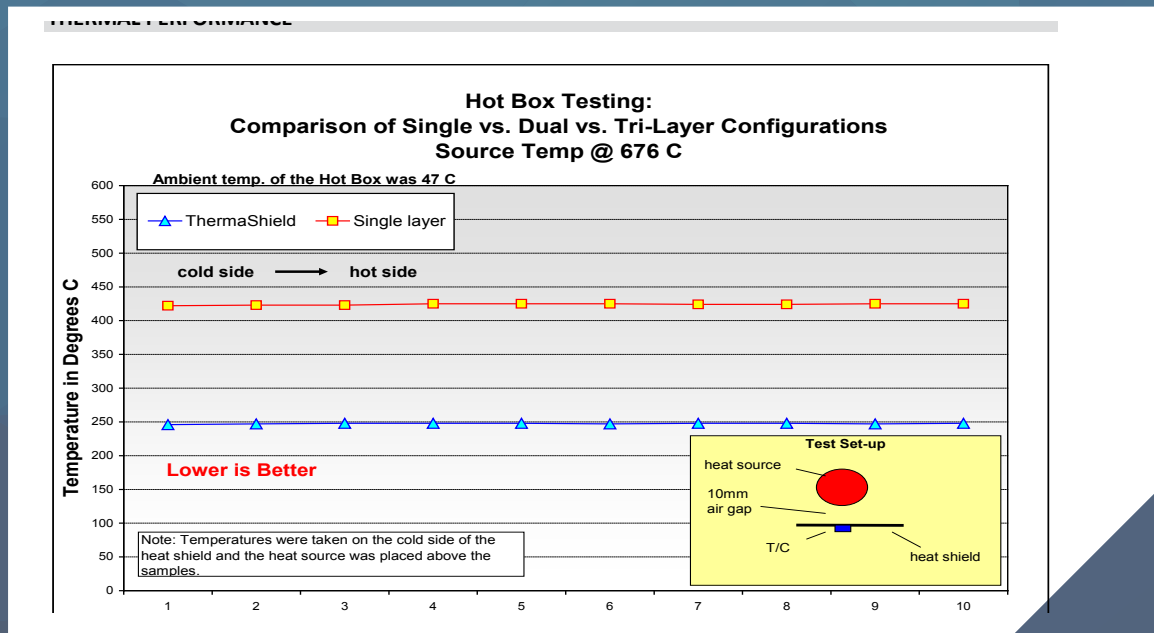
## OTHER PROPERTIES

- All three layers of ThermaShield are stamped simultaneously, which requires only one tool.
- Materials for each layer can be selected to meet customer-specific thermal scenarios.
- Materials used efficiently to reduce mass and cost.

<b>THICKNESS</b>	Typical thickness (all three layers) is 0.25mm to 10mm
<b>MATERIAL SELECTION</b>	Common materials include aluminized steel, 304/409/439 stainless steel and aluminum
<b>ASSEMBLY</b>	Depending on the material selection, ThermaShield may be banded, welded or bolted
<b>EDGE CONDITION</b>	Partially and fully hemmed



## THERMAL PERFORMANCE



## ACOUSTIC PERFORMANCE

