
Introduction

The ST-2X3 thermal interface pad provides a thermally conductive interface between Microchip's SA50 Series DC/DC converters and the customer's base plate/mounting surface.

The ST-2X3 can be used with any versions of the SA50 or SF200.

Microchip has achieved decades of flawless execution in harsh space environments. Producing complex custom (radiation hardened) switching power supply designs and systems, is now complemented with the "ST-2X3" thermal interface pads. Designed, manufactured, and shipped worldwide. The complete line of space grade inverters, EMI filters and accessories are ideal choices for decades to come.

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1. Benefits and Features

- Silicone-free, wax-free grease on an aluminum foil substrate
- Fills microscopic surface voids without changing phase to maximize heat transfer capability
- Thermal Resistance = $0.032\text{ }^{\circ}\text{C in}^2/\text{W}$ (measured at 50 psi)
- Only 0.004" thickness (before compression)
- NASA outgassing compliant:
 - (TML) = 1% max
 - (CVCM) = 0.1% max
- Fits all members of the SA50 and SF200 series of DC/DC converters and EMI filters
- This product is classified as EAR99

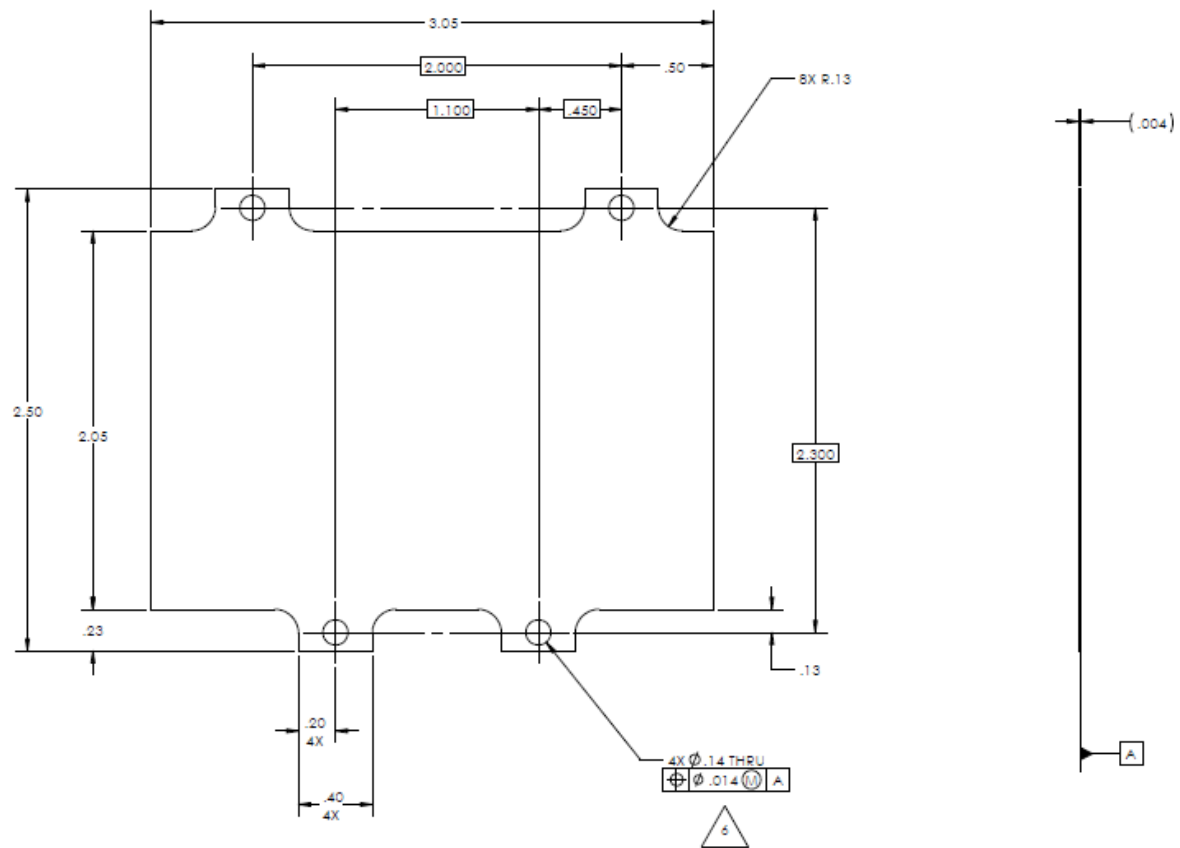
2. Performance and Life

This section shows the performance parameters of the ST-2X3 thermal interface pad under the following conditions, unless otherwise specified:

Parameter	Conditions	Nom	Units
Thermal Resistance	Measured at 50 psi	0.032	°C in ² /W
Shelf Life	At 18 °C ±10 °C in a closed container	5	Years
Mass	—	1	g

3. Mechanical Outline

Figure 3-1. Mechanical Outline



4. Ordering Information

The following chart defines the part number nomenclature.

Model	ST-2X3	Thermal Interface pad.
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3D step file available upon request.

4.1 Contact Information

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5. Revision History

The revision history describes the changes that were implemented in the document. The changes are listed by revision, starting with the most current publication.

Revision	Date	Description
B	08/2023	- Updated Benefits and Features. - Added mass information and updated thermal resistance in Performance and Life. - Made grammar and style updates throughout the document.
A	03/2021	Initial Revision

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- Local Sales Office
- Embedded Solutions Engineer (ESE)
- Technical Support

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