

SPACECRAFT SYSTEMS

MEMS Solid Micro-Thruster Array

The MEMS Solid Micro-Thruster Array features a compact structure and flexible installation design. It integrates standard interfaces, self-contained control, and drive modules, making it ideal for attitude and orbit control of micro- and nanosatellites. The array employs a pulsed working mode, allowing precise selection and activation of individual micro-thruster elements to provide accurate impulse or torque output.

TECHNICAL SPECIFICATIONS

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Dimensions (mm)	70 × 70 × 30
Mass (g)	200
Impulse Range	10 ⁵ –10 ⁶ N·s
Mounting Material	2A12–H112
Operating Temperature (°C)	–15 to +55
Storage Temperature (°C)	–30 to +55
Communication Interface	CAN / RS-422

Quick Overview

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Key Specifications

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Key Features

- MEMS-based technology with a pipeline-free and valveless design.
- Long on-orbit storage life.
- Lightweight and compact structure.
- “Digital” variable thrust capability.

Applications

- Used in **nanosatellite attitude and orbit control**, providing **precise pulsed micro-thrust** for fine maneuvering and stabilization.

Documentation & Resources

- [Technical Specifications](#)
- [Applications](#)