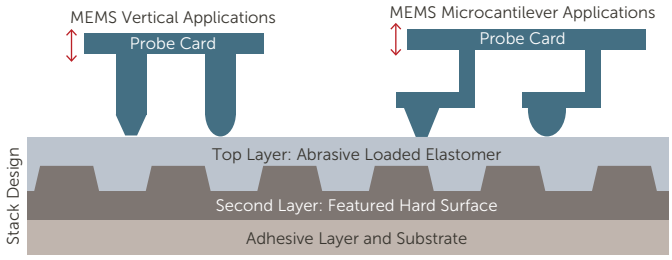
Dual Action MEMS

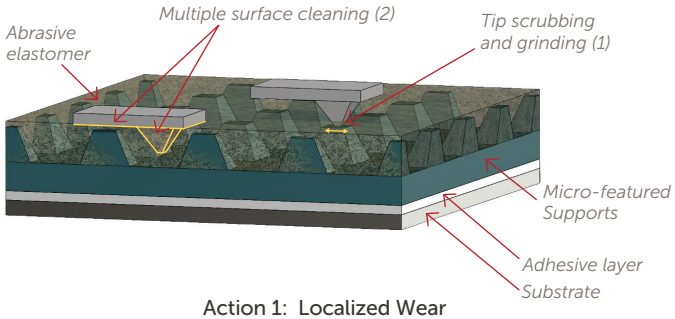
Advanced probe card cleaning for improved probe life and performance

Dual Action MEMS is an advanced probe card cleaning material designed specifically for MEMS probe cards with shaped pin tips. The material combines the scrubbing and grinding performance of Probe Lap® materials with the shaping and polishing capabilities of Probe Polish® materials in a single cleaning solution. This dual-action approach effectively removes contaminants while helping maintain critical probe tip geometry, reducing tip wear and supporting consistent electrical contact performance. By replacing traditional multi-step cleaning processes, Dual Action MEMS helps reduce maintenance time, improve operational efficiency, and extend probe card service life.

Dual Action MEMS Applications



Dual Action Cleaning Mechanism



Action 1: Localized Wear
Action 2: 3-Dimensional Cleaning

APPLICATION

Dual Action MEMS is intended for use on MEMS microcantilever and vertical probe cards with shaped pin tips. A featured support layer ensures full cleaning of microcantilever paddles and tips while maintaining the tip shape.

FEATURES & BENEFITS

Dual cleaning technology	Combines scrubbing, grinding, shaping, and polishing in a single material, simplifying the probe card cleaning process.
Engineered for MEMS shaped-tip probe cards	Delivers effective cleaning for microcantilever and vertical probe cards while preserving critical tip geometry.
Integrated support layer design	Ensures full engagement and cleaning of microcantilever paddles and probe tips for more consistent performance.
Reduced probe tip wear	Extends probe card lifetime, reduces maintenance requirements, and lowers total cost of ownership.

SPECIFICATIONS

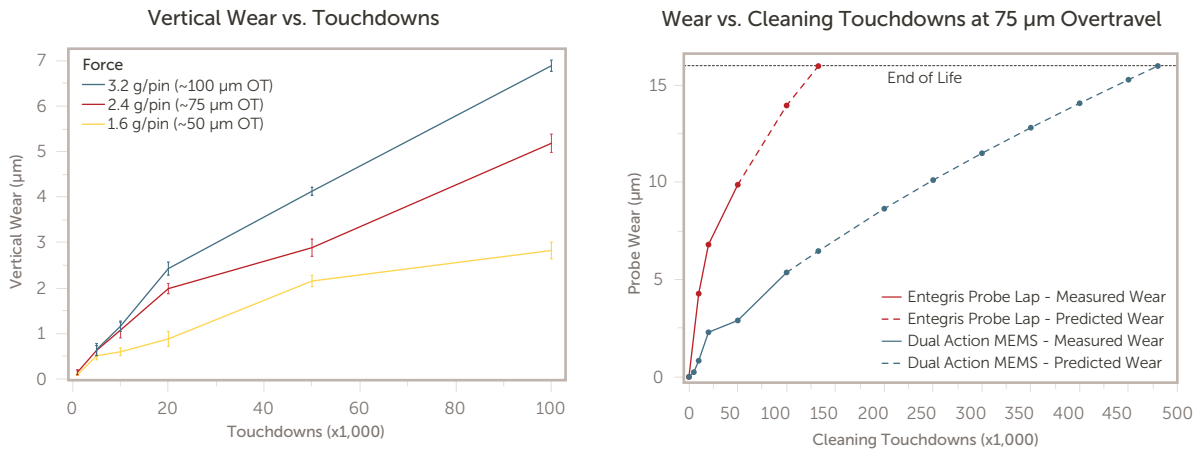
Temperature range	-40° – 175°C
Shelf life	2 years from ship date
Storage conditions	Room temperature
Recommended cleaning Index	90 µm*

**May vary with probe technology, contact Entegris for more information.*

	SHEET	200 MM WAFER	300 MM WAFER
DA MEMS Thickness (Cover films removed)	115 ± 20 µm	115 ± 20 µm	115 ± 20 µm
Support Carrier	N/A	725 ± 20 µm	775 ± 20 µm
Total Install Height	115 ± 20 µm	840 ± 40 µm	890 ± 40 µm

Measurements do not include cover film, remove cover film before use.

PERFORMANCE DATA



Dual Action MEMS vertical wear with cleaning overtravel (left) and compared to probe lap control (right). Dual Action MEMS provides reduced vertical wear, extending probe card lifetime compared to standard Probe Lap processes.

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
RNPDA-70AA-0015A0	DA, MEMS, 300 MM WAFER
RNPDA-70AA-0068	DA, MEMS, 150 MM SQUARE
RNPDA-70AA-0043A0	DA, MEMS 200 MM WAFER
RNPDA-70AA-0055	DA, MEMS, 100×200 MM
RNPDA-70AA-0139	DA, MEMS, 127×203.2 MM

Custom part sizes available upon request.

FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit entegris.com and select the Contact Us link to find the customer service center nearest you.

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