



GREATER PROTECTION. SIMPLER DESIGN.

A pioneering concept in immersion protection for mobile electronics.

Addressing MEMS microphone installation challenges

Printed circuit board assembly presents a number of challenges.

High-speed assembly may compromise the integrity of MEMS microphones. Damage and contamination cause yield loss, performance degradation, and higher production costs.

As mobile devices get smaller, installing traditional acoustic vents in shrinking acoustic channels becomes more technically difficult.

To overcome these challenges, Gore has developed a proven solution based on our proprietary ePTFE technology.

From particle protection and seamless integration to simpler design and reduced complexity, it's not just our latest venting solution.

It's a brand-new design concept.

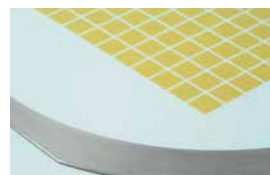
NEW: Style 300

For microphone manufacturers - water and dust protection.

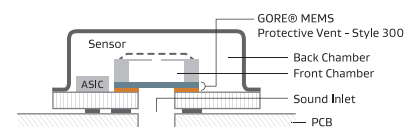
Installed inside the MEMS microphone during the microphone packaging process, Style 300 vents provide component-level IP68* water and dust protection without any special handling during the circuit board assembly process. Parts are digitally mapped in a wafer format and are compatible with high-speed die attach equipment.

This pioneering venting solution eliminates the need for a separate acoustic vent installed on the housing, reducing complexity and saving space in the acoustic channel of water-protected devices.

*Resistant to submersion up to a maximum depth of 2m underwater for up to 30 minutes.



Placement of Vent



Simplify design

Our pioneering concept provides a revolutionary “plug-and-play” water and dust protection solution to help OEMs overcome the challenge of installing traditional acoustic vents.

This integration not only saves mechanical space, but offers a more consistent acoustic performance.

Reduce complexity

Device OEMs using microphones with GORE® MEMS Protective Vent – Style 300 can reduce the complexity of using an acoustic vent and simplify their supply chain, unlocking operational efficiencies and cost savings in human and material resources.

Additionally, the particle barrier feature reduces damage by contaminants during assembly, improving production yield.



PARTICLE SHIELDING

Reliable particle protection designed to reduce contaminants, increase yields and control manufacturing costs.



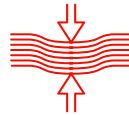
IMMERSION PROTECTION

An integrated design that enables component-level IP68-rated water immersion protection.



IN-PROCESS TESTING

Manufacturers can monitor sound quality and permeability within the device, alleviating the need to assign further resources for re-testing.



PRESSURE EQUALIZATION

The breathable ePTFE membrane of the vent allows gasses to pass through the microphone port to mitigate pressure build-ups that may cause damage.



SEAMLESS INTEGRATION

Designed to handle the intense rigor of high-volume, high-speed installation, and multiple reflow cycles of up to 280 °C for 40 seconds.

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