GORE® Portable Electronic Vents

GORE® MEMS Protective Vents

REDUCE FAILURE.
ENHANCE YIELDS.
REDUCE FAILURE.
ENHANCE YIELDS.

MEMS PROTECTION INSIDE OR OUT

**New GORE® MEMS Protective Vents** are available in two formats designed to meet the specific needs of both circuit board assembly and microphone manufacturers.

**STYLE 100 - For circuit board assembly.**
It can be installed over the top of a top-port microphone or on the circuit board opposite a bottom-port microphone, right before the reflow process. Available in reel packaging to enable seamless installation with high-speed SMT pick and place machines.

**STYLE 200 - For microphone manufacturers.**
It can be installed inside the MEMS microphone during the microphone packaging process, providing particle 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.

There are several technical challenges during high-volume assembly of printed circuit boards that can jeopardize the integrity of MEMS microphones – leading to performance degradation, significant yield losses and higher manufacturing costs.

The non-porous tape currently used by manufacturers covers the microphone port to prevent contaminants from entering. However, this leaves the microphone prone to potentially damaging pressure build-ups during solder reflow and prevents in-process acoustic testing.

Gore's design and engineering teams have developed a unique solution – proven to prevent particle contamination and pressure build-ups, allow in-process acoustic testing, and integrate seamlessly into automated dispensing and placement processes – **new GORE® MEMS Protective Vents**.
GORE® Portable Electronic Vents

**GORE® MEMS Protective Vents**

**PARTICLE PROTECTION**

**GORE® MEMS Protective Vents** are unique in that they provide reliable particle protection designed to reduce contaminants – helping to secure the SMT process, and helping manufacturers increase yields and reliably control manufacturing costs.

**PRESSURE EQUALIZATION**

Gore’s experience in providing vents with excellent airflow has been applied to the **GORE® MEMS Protective Vents**. Thanks to the breathable ePTFE membrane of the vent, it allows gases to pass through the microphone port to mitigate pressure build-ups that may cause damage to the microphone.

**IN-PROCESS TESTING**

Gore has developed a technology that both enables in-process testing of acoustic performance and improves process efficiency, by allowing manufacturers to monitor sound quality and permeability within the device and alleviating the need to assign resources further down the production line for re-testing.

**SEAMLESS INTEGRATION**

Working directly with OEMs, microphone manufacturers, and contract manufacturers, Gore has manufactured over 100 million **GORE® MEMS Protective Vents** designed to handle the intense rigor of high-volume, high-speed installation, as well as multiple reflow cycles of up to 280 °C for 40 seconds.
Product and Application Leadership
With over 20 years of industry expertise and over 3 billion vents sold, Gore provides the optimum venting solution to OEM manufacturing chains. Grounded in a deep understanding of acoustic science and SMT manufacturing processes – reinforced by years of experience in material sets and capabilities research – we are specialists at balancing the trade-offs between diverse problems such as adverse environments, contamination prevention and acoustic performance.

Reliable Performance
At Gore, we make a commitment to every customer that our products will “do what we say they will do”, and we stand behind that promise. Every product must adhere to the highest standards because their quality, performance and reliability impact not only our reputation, but our customers’ reputation too. To ensure products are “fit for intended use” a comprehensive understanding of the end-use application is required, as well as pertinent test requirements.

Local Sales and Technical Support
Our outstanding local sales and technical teams across the globe offer value-added services, provide technical support and collaborate with OEMs and their contract manufacturers to develop differentiated products and ensure there are no surprises before or after product launch.

Trustworthy Partner
Our global supply chain is robust and agile with short lead times, consistent quality and sufficient capacity for the largest programs and fastest ramps.

Why GORE® Portable Electronic Vents?
Leading OEMs choose Gore because our products and services enable them to develop differentiated products with low development and supply-chain risk in a fast-paced, highly competitive market.

Gore is the world leader in understanding expanded polytetrafluoroethylene (ePTFE) and its capabilities. Our ability to engineer ePTFE to include specific physical properties enables us to develop high performance products for challenging environments.

The GORE™ Membrane: The heart of our venting technology

OUR KNOWLEDGE OF FLUOROPOLYMERS AND OUR ADVANCED ENGINEERING CAPABILITIES ARE AT THE HEART OF A WIDE RANGE OF REMARKABLE MATERIALS.
GORE® Portable Electronic Vents

W. L. Gore & Associates

W. L. Gore & Associates is a global materials science company dedicated to transforming industries and improving lives. Founded in 1958, Gore has built a reputation for solving complex technical challenges in the most demanding environments — from revolutionizing the outerwear industry with GORE-TEX® fabric to creating medical devices that improve and save lives to enabling new levels of performance in the aerospace, pharmaceutical and mobile electronics markets, among other industries. The company is also known for its strong, team-oriented culture and global recognition from the Great Place to Work® Institute. Headquartered in Newark, Del., Gore employs 9,500 Associates and generates annual revenues of $3.5 billion.

Contact Us
For additional assistance, please contact a Gore representative.

INTERNATIONAL CONTACTS

<table>
<thead>
<tr>
<th>Country</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>+61 2 9473 6800</td>
</tr>
<tr>
<td>Benelux</td>
<td>+34 905 612 2211</td>
</tr>
<tr>
<td>China</td>
<td>+86 21 5172 8299</td>
</tr>
<tr>
<td>France</td>
<td>+33 1 5695 6565</td>
</tr>
<tr>
<td>Germany</td>
<td>+49 89 4612 2211</td>
</tr>
<tr>
<td>India</td>
<td>+91 22 6768 7000</td>
</tr>
<tr>
<td>Italy</td>
<td>+39 045 6209 240</td>
</tr>
<tr>
<td>Japan</td>
<td>+81 3 6746 2570</td>
</tr>
<tr>
<td>Korea</td>
<td>+82 2 393 3411</td>
</tr>
<tr>
<td>Mexico</td>
<td>+52 81 8288 1281</td>
</tr>
<tr>
<td>Scandinavia</td>
<td>+46 31 706 7800</td>
</tr>
<tr>
<td>Singapore</td>
<td>+65 6733 2882</td>
</tr>
<tr>
<td>South America</td>
<td>+55 11 5502 7800</td>
</tr>
<tr>
<td>Spain</td>
<td>+34 93 480 6900</td>
</tr>
<tr>
<td>Taiwan</td>
<td>+886 2 2173 7799</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>+44 1506 460123</td>
</tr>
<tr>
<td>USA</td>
<td>+1 410 506 7812</td>
</tr>
</tbody>
</table>

W. L. Gore & Associates, Inc
401 Airport Road • Elkton, MD 21922 • USA
Phone: +1 410 506 7812 (USA) • Toll free: +1 800 523 4673
Fax: +1 410 506 8749 • Email: portableelectronics@wlgore.com
gore.com/portableelectronics

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