



Case Study: GORE® Acoustic Vents in a Smartphone

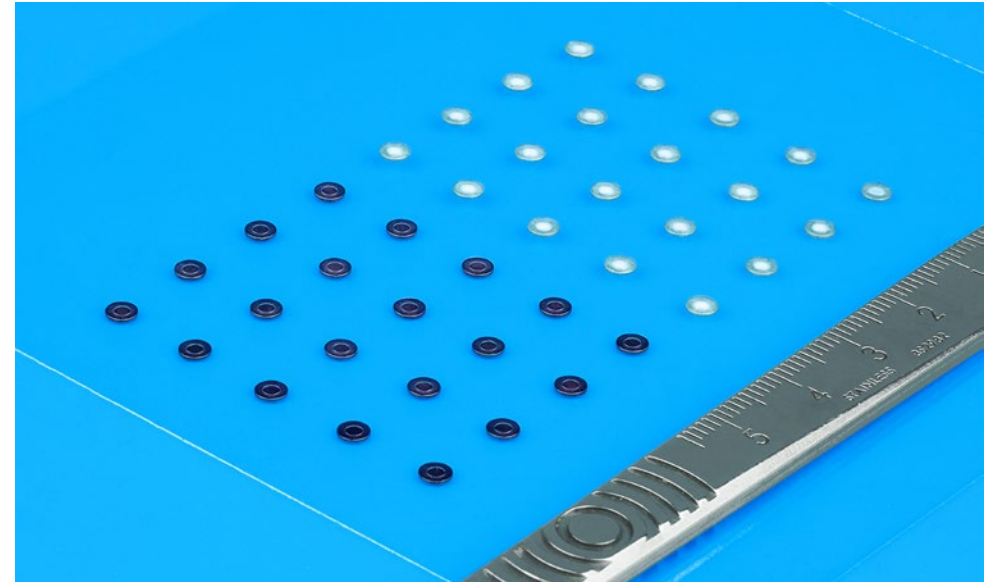
Small ID Size Meets Consistent High Quality in Mass Production



? CHALLENGE

During the development stage of a smartphone in 2021, a well-known OEM and former Gore customer was caught up in a costly predicament:

The company was testing acoustic vents offered by a competitor in a prototype, which performed correctly in limited testing quantities. However, **the customer lacked the confidence to use the competitor's product in mass production** because the inconsistent quality of the vents could result in unsatisfactory acoustic performance and numerous rejections in production. Since the company was also testing GORE® Acoustic Vents at the time, they decided to ask our experts for recommendations on how to select the best vent for mass production.



"From our previous business relations, the customer knew that Gore is a reliable partner with exceptional expertise and vast experience. Our client was sure that we would be able to meet their challenge."

Tsutomu Shirai, Field Sales Associate in Japan





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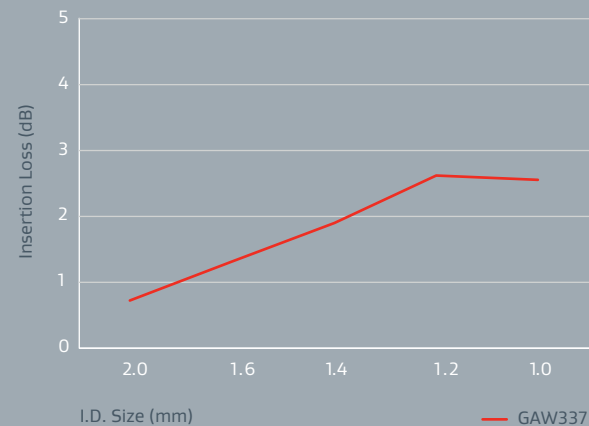
SOLUTION

We listened carefully to the concerns of the customer's acoustic team. Since the ID size might be affected by process variations, we recommended testing the acoustic performance with a smaller ID size than the designed value.

Testing showed: Despite their smaller ID size, GORE® Acoustic Vents provide a better and, above all, more consistent acoustic performance than the competitor. **Choosing our vents for mass production obviates performance problems and equips the OEM with essential design advantages for future projects.**

We took further measures to satisfy the needs of the customer's procurement department: In addition to optimizing the supply chain, we improved logistics by **relocating the manufacturing site for the acoustic vent production near the OEM's Contract Manufacturer plant.** We helped our customer to reduce overall expenses and shorten lead times.

Acoustic Response



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Tsutomu Shirai,
Field Sales
Associate in Japan

THE VENT USED: GORE® ACOUSTIC VENT GAW337

GAW337 is available with inner and outer dimensions of 1.4 and 3.0mm as well as a reference thickness of 0.36mm. Suited for shallow immersion, this standard part provides an IP68 rating and an insertion loss of less than 1.3 dB at 1kHz.

For more information on our standard vents visit www.gore.com/products/gore-acoustic-vents.



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RESULTS

With our help, the smartphone OEM was able to

- ensure the production of 1+ million phones per year without yield loss.
- provide stable and consistent acoustic performance in mass production.
- gain design advantages, saving 5% of space within the phone due to the small ID size of our vent.
- reduce transportation costs, lower custom fees and shorten lead times thanks to supply chain localization.
- set the bar for future projects in terms of design, development and production processes.



“For our customers, we spare no effort to submit a convincing offer in terms of costs and quality.”

Tsutomu Shirai, Field Sales Associate in Japan

WANT TO KNOW MORE?

Learn more about GORE® Acoustic Vents on our website:

gore.com/products/gore-acoustic-vents

Or find out more about our experience from exciting projects:

gore.com/mestories



Why Choose GORE® Portable Electronic Vents for Your Electronic Devices?

Leading OEMs have specified over 5 billion GORE® Portable Electronic Vents because they know our products and services can help accelerate their development of innovative and differentiated devices in fast-paced, highly competitive markets.

PRODUCT AND APPLICATION LEADERSHIP

Grounded in a deep understanding of material science and acoustics, Gore can provide the optimum venting solution. We balance trade-offs between diverse problems such as adverse operating environments, immersion events and acoustic performance.

RELIABLE PERFORMANCE

To ensure products are “fit for use”, every Gore product must adhere to the highest standards of quality, performance and reliability. Through a comprehensive understanding of end-use applications and requirements, our products do what they say they will do.

FAST DEVELOPMENT

The mobile electronics industry develops and releases new products quickly. Our fast response to customer requests during the development process sets us apart. Gore supports this need for quickness with designs and prototypes to ensure engineering teams can meet their project timelines and their application requirements.

SUPPLY SECURITY

Leading OEMs specify Gore because we have consistently proven our ability to quickly ramp up to supply vents for projects of over 10 million devices per year and to continue to supply high quality products on-time without disruption.

MATERIAL SCIENCE

Gore is a global materials science company dedicated to transforming industries and improving lives. Gore develops materials with microporous structures that provide desirable attributes and performance characteristics to engineer vents and other products used in a variety of markets and industries.

GLOBAL SUPPORT

Our global teams of sales associates, application engineers, manufacturing engineers, and research personnel enable us to provide agile and robust support to customers around the world.

Contact Us

For additional assistance, please contact a Gore representative.

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