



# EXPERTS IN DEVELOPING VERY SMALL PARTS

**CUSTOMER**  
Global designer and manufacturer of cell phones

**PART**  
Tiny blocking filter that allows sound to pass but not dirt and dust

**MATERIAL**  
Woven polyester mesh and 3M 9795B adhesive

**APPLICATION**  
Small filter used in cell phone speaker design

## CHALLENGE

The customer needed to develop a blocking filter that would let sound pass but not dirt and dust. Specifically, they required the following:

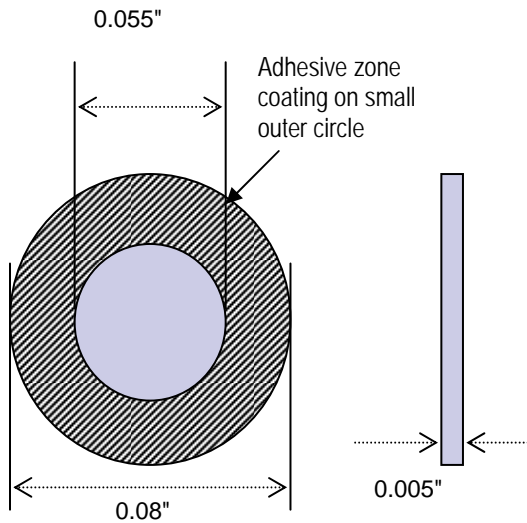
- ◆ The filter could have an inner diameter of only .055" and an outer diameter of .08" while maintaining concentricity and tension.
- ◆ Pressure sensitive adhesive applied only on the small outer ring.
- ◆ The ability to expedite large volumes of production-friendly parts.

## SOLUTION

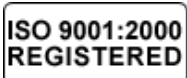
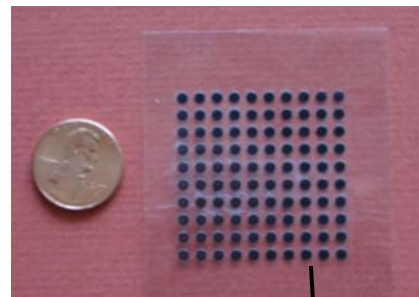
After working closely with the customer's engineering department, Marian offered a **specialized process** that produced precisely cut filters with a zoned adhesive for easy application.

## CUSTOMER BENEFITS

- ◆ **Capacity** at Marian is unparalleled, and the customer benefited from Marian's ability to develop custom machines and processes for small parts with special requirements.
- ◆ **Production efficiencies** increased as a result of the easy packaging provided by Marian.



Required filter dimension  
(Drawing 18x actual size)



E10807

Flexible Solutions for Industry  
sales@marianinc.com  
www.marianinc.com

