

The world runs better with Rogers.®

# PORON<sup>®</sup> ShockSeal<sup>™</sup> Handheld Grades (4790-79)

Extreme Impact Protection, Ultimate Reliability.

# PORON<sup>®</sup> ShockSeal<sup>™</sup> Foam Reduces Impact Force by More Than Four Times That of Competitive Materials!

As the demand for thinner, larger and more expensive LCD displays continues to grow, designers and manufacturers face new challenges with these increasingly complex technologies. PORON ShockSeal foams are specifically engineered to meet the challenging cushioning, sealing and protection requirements that larger displays demand. PORON ShockSeal foam is available as thin as 0.5 mm, and it conveniently conforms to some of the smallest and most intricate manufacturing designs.

## **Excellent Impact Protection**

Cell phones being dropped, netbooks falling off of laps and PDAs knocked off desks are just some of the everyday perils of working with handheld devices. PORON materials have always helped safeguard these devices, and now the PORON ShockSeal series offers even greater impact protection for sensitive applications.

As demonstrated in the graph below, **PORON ShockSeal foam reduces impact force by up to four times that of competitive material** and is almost twice as effective as PORON 92-12039 foam. In addition, the PORON ShockSeal materials absorb as much or more energy when compared to higher density materials.



Left: Representative of the impact absorbed by each material. Without any foam, the absorbed impact would be zero.

The information contained in this Sell Sheet is intended to assist you in designing with Rogers' High Performance Foam Materials. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose or that the results shown on the Data Sheet will be achieved by a user for a particular purpose. The user should determine the suitability of Rogers' High Performance Foam Materials for each application. The Rogers logo, The world runs better with Rogers., ShockSeal and PORON are licensed trademarks of Rogers Corporation. © 2010 Rogers Corporation, All rights reserved. Printed in U.S.A., 0910-PDF, Publication #17-211

### Long Term Protection and Sealing

PORON ShockSeal materials have the same excellent compression set resistance as other PORON offerings which allows them to maintain spring forces and effectively seal out dust and other particles. The graph below displays PORON ShockSeal foams' superior dust-sealing performance versus alternative gasketing material.



Left: A depiction of the average number of impacts necessary to compromise the foam seal. The max number of impacts for this test is 3000.

#### **High Compressibility**

The PORON ShockSeal series of foams offer essentially the same outstanding compressibility as the PORON 92 formulation, as is apparent in the graph below. When high compressibility, excellent impact protection and extreme performance is in demand, designers and engineers turn to PORON ShockSeal materials for all of their handheld electronics needs.

**Right:** The final thickness of PORON materials under a range of applied force.



The information contained in this Sell Sheet is intended to assist you in designing with Rogers' High Performance Foam Materials. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose or that the results shown on the Data Sheet will be achieved by a user for a particular purpose. The user should determine the suitability of Rogers' High Performance Foam Materials for each application. The Rogers logo, The world runs better with Rogers., ShockSeal and PORON are licensed trademarks of Rogers Corporation. © 2010 Rogers Corporation, All rights reserved. Printed in U.S.A., 0910-PDF, Publication #17-211

#### Compressibility Comparison