

Portable electronic devices are increasingly subjected to harsh outdoor environments. Therefore, it is essential to protect the speaker and microphone on these devices from the elements and environmental contaminants that could impair their effectiveness. Donaldson's acoustically transparent vents provide speakers & microphones with protection from dirt, dust, hair spray, oils, perspiration and water with excellent sound transmission.

## CREATING RELIABLE PROTECTION IN PARTNERSHIP

Our team serves as an extension to your engineering team offering tested and proven reliable venting solutions for a range of solar applications.

- Vent development, design, prototyping and testing for new applications
- Wide range of media choices

Donaldson's reputation has been built on its problem solving, quality solutions and commitment to improving product performance. Donaldson's worldwide network allows us to provide local support that's responsive and comprehensive – no matter where it's needed. A dedicated team of OEM account managers and engineers stands ready to solve even the most complex venting issue.



## WHY SELECT DONALDSON AS A VENTING PARTNER?

Donaldson Company, Inc. has a wealth of experience within the consumer electronics industry and continues to supply in excess of a billion vents that increase the reliability and effectiveness of devices and enclosures. We can offer a solution from our product portfolio or a customized venting configuration. Our experts will work with you to select the most appropriate solution to ensure you get the optimal performance for your application.

## DONALDSON VENTING SOLUTIONS

- Increased protection against product failure
- Improved product life: a durable, rugged solution that will equalize pressure
- Reduced maintenance costs and downtime
- Ease of integration





## MANUFACTURING CAPABILITIES

Donaldson prides itself on offering customers a wide variety of manufacturing capabilities, which includes:

- Cost-effective solutions
- Thermal and adhesive lamination
- Die cutting
- Injection and overmolding
- Ultrasonic welding
- Heat welding
- Pressure-sensitive adhesive
- Rapid prototyping
- Cleanroom levels from Class 10,000 to 100
- ISO 9001 - 2008 certification
- Global operations



## EXPERTISE & RESOURCES: Creating optimized venting solutions

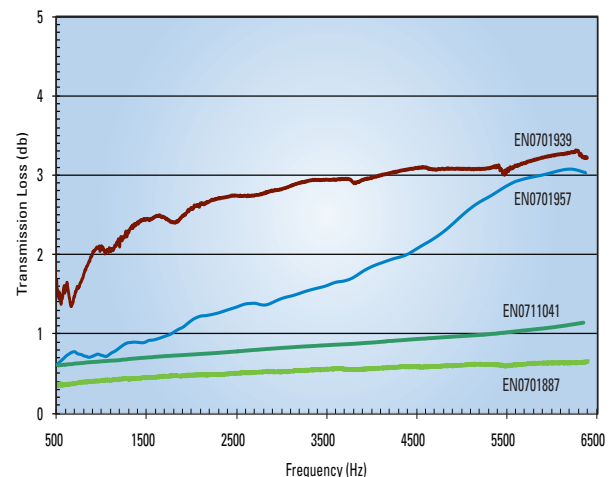
- Filter Efficiency Testing
- Permeability Testing
- SEM / EDX Examination & Evaluation
- Oleophobicity Analysis
- Hydrophobicity Analysis
- Environmental Testing
- Airflow Analysis
- MVTR Testing
- Diffusion Rate Testing

## TYPICAL APPLICATIONS:

- Cell/mobile phone
- Smart phone
- Portable media players
- Bluetooth earphone
- Outdoor radio
- Interphone/ Two-way radio
- Headphones
- Heart rate monitor
- Personal medical devices
- GPS devices
- Tablet computers
- Cycling computers

## ACOUSTIC MEDIA CHARACTERISTICS & TRANSMISSION LOSS\*

Property	Units	EN0701887	EN0711041	EN0701939	EN0701957
Material	-	Polyester	Polyester	Polyester	ePTFE*
Color	-	White	Black	Black	White
Thickness	mm	0.13	0.11	0.06	0.02
Transmission Loss 500-6500 Hz	dB	< 0.8	< 1.2	< 3.4	< 3.2
Airflow @ 12 mbar	l/Hr/cm <sup>2</sup>	11,400	6,809	1,182	1.8
Water Entry Pressure	cm H <sub>2</sub> O	11	11	20	1380
Oleophobicity Rating**	1-8	7	7	7	0
IP Rating	-	IP44	IP44	IP44	IP67
Pore Size	micron	100	50	18	0.05



Donaldson acoustic media can be used in BTE, ITE and Assistive Hearing Devices. Other filter materials are also available.

\* Expanded Polytetrafluoroethylene

\*\* Based on AATCC Spec 118-1992 and ISO 14419

### Important Notice

Many factors beyond the control of Donaldson can affect the use and performance of Donaldson products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, product specifications, availability and data are subject to change without notice, and may vary by region or country.



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## YOUR PARTNER IN PROBLEM SOLVING™

Protective Vents for Portable Electronics (PE007.EN.08.13)

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