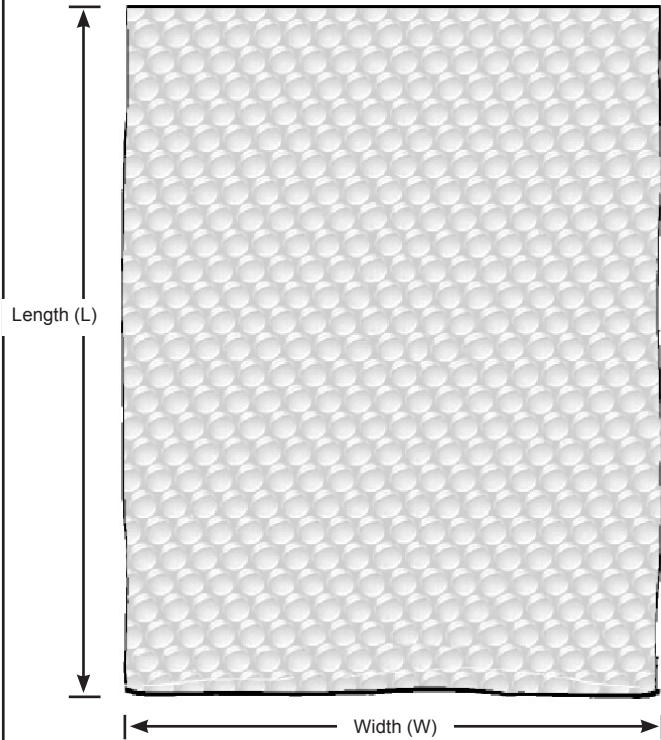




- A. Electrostatic bubble shielding film is made of metalised film, laminated to antistatic pink bubble film.
- B. This material offers excellent ESD protection combining the 'Faraday Cage' effect with an air gap. It also offers good mechanical protection and, being partially transparent, permits easy identification of contents. Its heavy-duty construction makes it suitable for re-use.



Specifications:

Electrical Properties

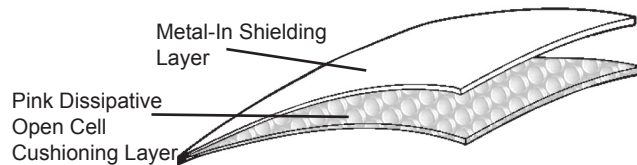
Electrical Properties	Typical Values
Surface Resistance:	
Outer Layer	1×10^4 to $< 1 \times 10^{11}$ ohms
Inner Layer	1×10^4 to $< 1 \times 10^{11}$ ohms
Static Decay	$< 0.2s$
Discharge Shielding	$< 50nJ$
Charge Generation	Teflon: -0.03 nC/in ² Quartz: $+0.10$ nC/in ²

Test Procedures/Method

IEC 61340-2-3
IEC 61340-2-3
MIL-STD-3010 4046
ANSI/ESD STM11.31*
Modified Incline Plane
ESD ADV 11.2-1995

Physical Properties

Physical Properties	Typical Values	Test Procedures/Method
Thickness:		
Polyester	13 micron	ASTM D2103
Antistatic PE	60 micron	ASTM D2103
Bubble properties		
Diameter	10mm	N/A
Height	5mm	N/A
Tensile strength	$> 15lbs/in^2$	ASTM D882
Puncture resistance	$> 25lbs$	FTMS 10001C
Transparency	$> 15\%$	ASTM D-1003-77
MVTR	$< 0.2g @ 100^\circ F$	ASTM F 1249



Item	Size (WxL)
90970	1.2m x 200m

Meets EN 61340-5-1 and Packaging standard IEC 61340-5-3 per IEC 61340-2-3 and ANSI/ESD STM11.31*.

RoHS 2 and REACH Statement

None of the RoHS 2 restricted materials or REACH substances of very high concern are intentionally added in manufacturing this product. Ref: European Union Directive 2011/65/EU and Regulation (EC) No. 1907/2006/CE. See Charleswater [Limited Warranty at Charleswater.co.uk](#).



Made in the United Kingdom

Unless otherwise noted, tolerance $\pm 10\%$

Specifications and procedures subject to change without notice.

* Discharge Shielding test to be performed after film converted into a bag.



Shielded Bubble Film

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Drawing Number
90970.E

DATE:
August
2014