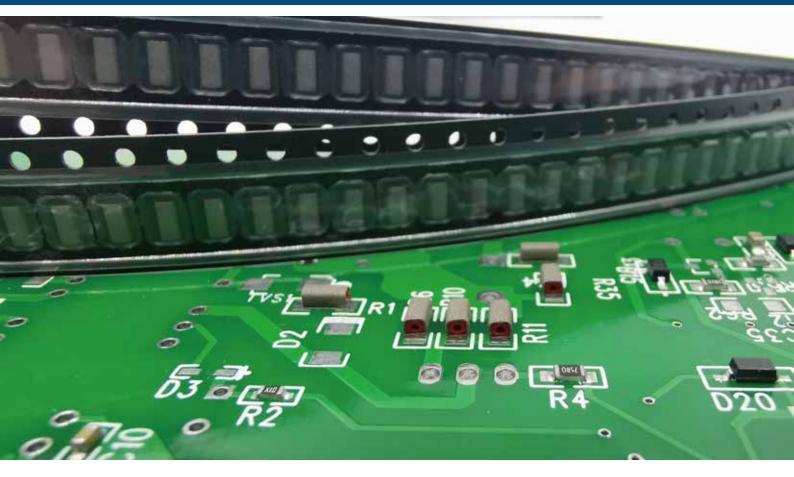


# DOUBLESHIELD PAD

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#### 1. Introduction

Grounding products should ensure electrical performance without breaking under mechanical or environmental stress throughout the life time of the product. Doubleshield Pad ensures reliable grounding performance in electronic applications. The Pads are delivered in tape-and-reel packaging for automated placement and soldering reflow using standard SMT equipment.

#### **Features and benefits**

The flexible and easily compressible Pad can to take up tolerances and close the gap between a PCB and another component in addition to providing a reliable grounding contact.

SMT compatible Excellent mechanical properties Large conformable contact area

#### **Applications**

The Doubleshield Pad is used as a grounding contact on printed circuit boards commonly used in the electronics industry.

#### 2. Product description

The Doubleshield Pad has hollow profile with a core of soft silicone and a shell of electrically conductive silicone rubber filled with Ni/C particles.



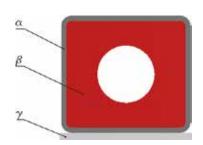
The product is laminated with a solderable metal strip in Nickel alloy 201.

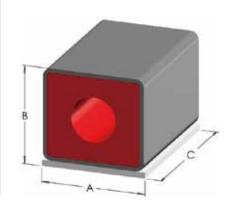


#### 3. Product dimensions

The Doubleshield Pad is delivered in three different versions but different cross sections and length can be developed to fit any demand.

Material	SEM1098621	SEM1007821	SEM1083821					
α	Schlegel 8686	Schlegel 8686	Schlegel 8686					
β	Schlegel 1445	Schlegel 1540	Schlegel 1445					
γ	Nickel Alloy 201	Nickel Alloy 201	Nickel Alloy 201					
Dimension (mm)								
А	2.55	2.55	1.80					
В	2.40	2.40	1.60					
С	3.60	3.60	3.60					
PCB Footprint Recommendation* (mm)								
А	2.70	2.70 1.85						
С	3.85	3.85 3.85						





<sup>\*</sup>Recommended footprint dimensions are based on successful production tests made by Schlegel, we always recommend users to consider their internal production properties.

#### 4. Product properties

Property	Test Standard	Unit	SEM1098621	SEM1007821	SEM1083821
Recommended compression stop		mm	1.9	1.9	1.2
Force to compress to RCS*		N	2.2	3.0	2.0
Electrical resistance at RCS*	Schlegel S9	Ohm	0.15	0.15	0.15
Compression set, @ 22h/125 °C	ISO 815	%	15	12	12

<sup>\*</sup>RCS - Recommended compression stop

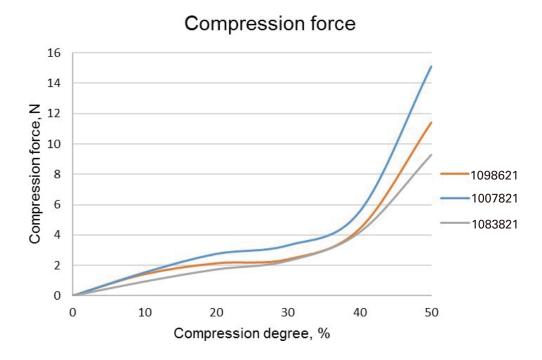
The recommended operating temperature is between -55°C and +125 °C. To assure a safe and repeatable compression Schlegel recommend the use of mechanical compression stops allowing a compression degree of 20 - 25%. Minimum 10% and maximum 50% compression is recommended.

The Schlegel Doubleshield Pad fulfil the requirements set by the Directive 2011/65/EU and its amendments (RoHS).



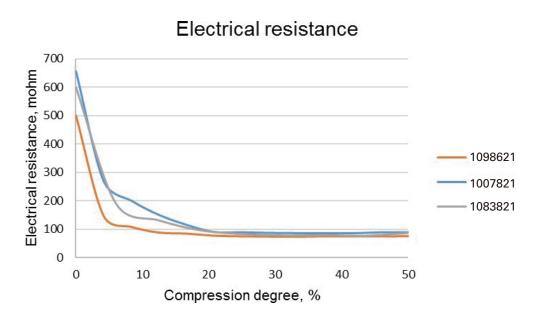
#### 5. Compression force

The compression force versus compression degree is shown in the graph below.



#### 6. Electrical resistance

The electrical resistance versus compression degree is shown in the graph below.





#### 7. Packaging

The Doubleshield Pad is packaged and delivered in tape-and-reel.

#### 8. Storage conditions

The product is delivered in sealed plastic bags and the products are as such considered as MSL-1 with an unlimited storage time. This assumes that the storage is indoors to protect the product from rain and direct sunshine and at a temperature between 5 and 30°C and a relative humidity of 20-80%.

#### 9. Disclaimer

The data given in this product information should be taken only as a guide and not a specification.

The recommendations and data given are based on our experience to date, however, no liability can be assumed in connection with their usage and processing.



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