

This product is on the Qualified Product Listing under the Defense Standardization Program. Check our listing [here](#).



SCS Static Shield Film 81705 Series is manufactured from four layers - static dissipative coating, polyester, metal and polyethylene laminate. The polyester dielectric in concert with the metal layer provides discharge shielding. The exterior is static dissipative and allows electrostatic charges to be removed when grounded. Film is qualified to MIL-PRF-81705 Type III, Class 2.

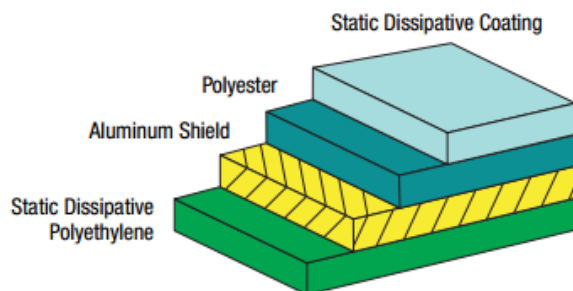
MIL-PRF-81705E:

3.6 Identification of material. The barrier material shall have two groups of markings in block form and in machine direction. Group A marking shall state the specification number, type, class, manufacturer's name, manufacturer's designation, month and year of manufacture, lot number and heat sealing conditions (temperature, pressure and dwell time). The letters and figures shall be clear, legible, and shall be not less than 1/4 inch high. Group B markings shall identify the protective qualities of the materials as follows: For type I – EMI/STATIC SHIELD and for type III – STATIC SHIELD. These letters shall be not less than 1/2 inch high. The two groups of markings on all three types of material shall be either printed using a water-resistant ink or embossed and shall be visible if the material is fabricated into a bag or pouch. The two groups of markings shall be printed or embossed sequentially, complete, and continuous lengthwise with a space of one inch between groups. A complete group of markings shall appear once in each six inches of width of the roll and flat cut.

STATIC SHIELD

MIL-PRF-81705E TYPE III CLASS 2
SCS, DESCO INDUSTRIES INC. P65M
AUGUST 2015 LOT: 1508101
SEAL COND: 360 F, 60 PSI, 2 SEC.

Note: Film printing is black. Artwork not to scale.



Physical	Typical Value	Testing Method
Tensile Strength	4600 PSI, 32 MPa	ASTM D882
Puncture Resistance	12 lbs, 53 N	MIL-STD-3010 Method 2065
Seam Strength	Pass	MIL-STD-3010 Method 2024
Thickness	2.8 mils, 0.071 mm +/-10%	MIL-STD-3010 Method 1003
Marking Abrasion Resistance	Pass	MIL-PRF-81705E Method 4.6.6
Contact Corrosivity	Pass	MIL-STD-3010 Method 3005*
Transparency	40%	MIL-STD-3010 Method 4034
Electrical	Typical Value	Testing Method
EMI Attenuation	≥ 10 db	MIL-PRF-81705E Method 4.6.7
ESD Shielding	≤ 10 nJ	MIL-PRF-81705E Method 4.6.9
Surface Resistivity - Interior	≥ 1 x 10 ⁵ to < 1 x 10 ¹² ohms/sq	MIL-PRF-81705E Method 4.6.8
Surface Resistivity - Exterior	< 1 x 10 ¹² ohms/sq	MIL-PRF-81705E Method 4.6.8
Static Decay	≤ 2 seconds	MIL-STD-3010 Method 4046
Heat Sealing Conditions	Typical Value	
Temperature	360°F, 182°C	
Time	2 seconds	
Pressure	60 PSI, 414 KPa	

*Passes on all surfaces noted in MIL-PRF-81705E Special Requirement 6/

Film is free of silicones and heavy metals.

RoHS 3, REACH, and Conflict Minerals Statement

None of the RoHS 3 restricted materials or REACH substances of very high concern as of 2017/07/07, or Conflict Minerals are intentionally added in manufacturing this product. Ref: European Union Directive 2011/65/EU and Regulation (EC) No. 1907/2006/CE. See [SCS Warranty, Limitation of Liability and Remedies](#)



Specifications and procedures subject to change without notice.

STATIC SHIELD FILM, 81705 SERIES

SCS

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**DRAWING
NUMBER**
81705 Film

DATE
October
2017