



DESCO INDUSTRIES INC

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QUALIFICATION REPORT – ANSI/ESD S20.20

SCS CUSHION SHIELDING 2300R Series

ANSI/ESD S20.20	SCS Test Results	Test Methods
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Surface Resistance (ohms) @ 12% RH, 23°C, 48-72 hours conditioning, N=10 specimens, 100V

Interior (Sealing Surface)	≥ 1.0x10 ⁴ to < 1.0x10 ¹¹	See Table 1	ANSI/ESD STM11.11
Exterior	≥ 1.0x10 ⁴ to < 1.0x10 ¹¹	See Table 1	ANSI/ESD STM11.11

Surface Resistance (ohms) @ 50% RH, 23°C, 48-72 hours conditioning, N=6 specimens, 100V

Interior (Sealing Surface)	≥ 1.0x10 ⁴ to < 1.0x10 ¹¹	See Table 1	ANSI/ESD STM11.11
Exterior	≥ 1.0x10 ⁴ to < 1.0x10 ¹¹	See Table 1	ANSI/ESD STM11.11

Discharge Shielding (nJ) @ 23°C, minimum 48 hours conditioning, N=6 specimens @ 6 individual readings per specimen

@ 12% RH	< 20	See Table 1	ANSI/ESD STM11.31
@ 50% RH	< 20	See Table 1	ANSI/ESD STM11.31

Test Equipment (Calibration records and test results are located at SCS (Sanford, NC)):

For Test Method ANSI/ESD STM11.11:

- ETS Controlled Environment Chamber (Model 5532)
- SCS Surface Resistance Meter (Model 770761)
- SCS Concentric Ring Probe (Model 770007)

For Test Method ANSI/ESD STM11.31:

- ETS Controlled Environment Chamber (Model 5532)
- ETS Shielded Bag Test System (Model 4431T)

Table 1: Test Results:

Specimen	Surface Resistance (ohms) 48-72 hours conditioning				Discharge Shielding (nJ) min. 48 hours conditioning	
	Interior @ 23°C, 12%RH	Exterior @ 23°C, 12%RH	Interior @ 23°C, 50%RH	Exterior @ 23°C, 50%RH	@ 23°C, 12%RH (avg 6 individual)	@ 23°C, 50%RH (avg 6 individual)
1	1.77 x 10 ⁹	3.47 x 10 ⁹	1.67 x 10 ⁸	9.03 x 10 ⁷	1.53	1.17
2	2.77 x 10 ⁹	6.81 x 10 ⁹	1.80 x 10 ⁸	1.10 x 10 ⁸	1.83	1.96
3	1.91 x 10 ⁹	4.29 x 10 ⁹	1.30 x 10 ⁸	1.66 x 10 ⁸	0.51	0.53
4	1.91 x 10 ⁹	4.93 x 10 ⁹	1.60 x 10 ⁸	1.39 x 10 ⁸	0.87	0.78
5	2.33 x 10 ⁹	2.96 x 10 ⁹	1.57 x 10 ⁸	1.10 x 10 ⁸	0.49	0.53
6	2.39 x 10 ⁹	5.28 x 10 ⁹	1.46 x 10 ⁸	8.72 x 10 ⁷	0.64	0.61
7	1.66 x 10 ⁹	2.04 x 10 ⁹				
8	1.92 x 10 ⁹	3.22 x 10 ⁹				
9	1.91 x 10 ⁹	2.41 x 10 ⁹				
10	2.78 x 10 ⁹	2.16 x 10 ⁹				
Min Ind=	1.66 x 10 ⁹	2.04 x 10 ⁹	1.30 x 10 ⁸	8.72 x 10 ⁷	0.48	0.51
Max Ind=	2.78 x 10 ⁹	6.81 x 10 ⁹	1.80 x 10 ⁸	1.66 x 10 ⁹	1.91	2.00
Mean of Ind=	2.14 x 10 ⁹	3.76 x 10 ⁹	1.57 x 10 ⁸	1.17 x 10 ⁸	0.98	0.93
Std Dev Ind =	4.05 x 10 ⁸	1.55 x 10 ⁹	1.72 x 10 ⁷	3.03 x 10 ⁷	0.53	0.52