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TEST REPORT

Tempo
Static Dissipative High Density Polystyrene Carriers

TESTED TO INDUSTRY SPECIFICATIONS
ESD STM 11.11-2001
(Surface Resistance)

Report #: 2002-003
January 14, 2001

SUMMARY

Six polystyrene carriers were received for testing of surface resistance. The surface resistance of the samples average 6.7×10^9 ohms. This material would be considered static dissipative.

DISCUSSION

Six polystyrene carriers were received. The samples were conditioned for 48 hours at 12% R.H. and 72°F. Testing was carried out in the conditioning environment. The resistance was measured using the test methods defined in ESD STM 11.11-2001 on the back surface of the carriers (the only surface flat enough for the measurements). Two measurements were made on each carrier. The data collected during this testing is included below in Table 1.

The data collected fall well within the range required for the materials to be considered static dissipative, making the carriers compatible with most industry recommendations for packaging electrical components. The ESD Association defines static dissipative as being between 1×10^4 and 1×10^{11} ohms.

Table 1
Surface Resistance of Styrofoam Carriers

Carrier #	Location	Surface Resistance
1	A	$2.50 \times 10^{10}\Omega$
	B	$2.01 \times 10^{10}\Omega$
2	A	$4.64 \times 10^{9}\Omega$
	B	$8.43 \times 10^{9}\Omega$
3	A	$7.28 \times 10^{9}\Omega$
	B	$5.41 \times 10^{9}\Omega$
4	A	$6.63 \times 10^{9}\Omega$
	B	$4.62 \times 10^{9}\Omega$
5	A	$4.57 \times 10^{9}\Omega$
	B	$3.83 \times 10^{9}\Omega$
6	A	$4.98 \times 10^{9}\Omega$
	B	$3.78 \times 10^{9}\Omega$
Average		$6.67 \times 10^{9}\Omega$
Minimum		$3.78 \times 10^{9}\Omega$
Maximum		$2.50 \times 10^{10}\Omega$

EQUIPMENT USED FOR TESTING

Resistance Meter: Keithley 6517a.
ETS Model 803B Resistance Probe
ETS Model 809B Surface Resistance Verification Fixture.

The results provided in this report are accurate within the limits appropriate to each test standard. The results of this report are statistically significant only to the samples submitted for testing. River's Edge Technical Service has no controls, and assumes no responsibility for the tested product's functionality or use.

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1/14/2002

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