ALL-SPEC INDUSTRIES

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Sierra™

TEST RESULTS FROM IBM

QUALITY CONTROL LABORATORIES
IBM SEMEA - ITALY
For AP, DP, DS, and RI 2 Layer Rubber Series

TEST PROCEDURES : EN 100015.1 - FED.TM 101 C - EOS/ESD 11.11

TEST ACTIVITIES : The ESD lab has performed the following test :

A - Surface resistance / resistivity
B - Ground resistance
C - Decay time

SAMPLING : Analysis have been performed from 9 samples by the same sampling.
Tests have been carried out on 3 specimens for every measure characteristic.

CONDITIONING : Sampling has been submitted to the below environment conditions :

> 48 hours at :	23° C ± 2°C	Temperature
	20 ± 3%	Relative Humidity (Test A & B)
	12 ± 3%	Relative Humidity (Test C)

TEST RESULTS :

TEST	METHOD	UNIT	Values	Samples Tested
Surface Resistance (Inner Layer)	EOS/ESD 11	Ohm	3.7×10^{2}	3 (*)
Surface Resistance (Outer Layer)	EOS/ESD 11	Ohm	1.8×10^{8}	3 (*)
Surface Resistance (Inner Layer)	EN 100015.1	Ohm	1.1×10^{5}	3
Surface Resistance (Outer Layer)	EN 100015.1	Ohm/sq	5.0×10^{7}	3
Ground Resistance	EN 100015.1	Ohm/sq	4.3×10^{6}	3
Decay Time	FED TM 101C	Sec.	.01 (posit.) .01 (negat.)	3

NOTE : Reported values represent the average of values found.

(*) Results are referred on finished product (multilayer); it is possible that analysis performed at "single layer level" could show values lightly different.

Decay time has been evaluated versus 99% dissipation (cut off).

Surface resistance measurements were carried out using an ETS 803B probe.