



Technical Products, Inc.

P: 262-335-3635 | F: 262-335-3606

E: tpi@technicalproductsinc.com

www.technicalproductsinc.com

Semitron® ESd 225 Material Specifications

Semitron® is a high performance material for use in the semiconductor industry.

Physical Properties	Units	Test	ESd 225
Density	lb/in ³ g/cm ³	D792	0.048 1.33
Water Absorption, 24 hrs.	%	D570	2.0
Water Absorption, Saturation	%	D570	-

Mechanical Properties	Units	Test	ESd 225
Tensile Strength	psi	D638	6100
Tensile Modulus	psi	D638	225,000
Tensile Elongation at Break	%	D638	10
Flexural Strength	psi	D790	6000
Flexural Modulus	psi	D790	190,000
Compressive Strength	psi	D695	-
Compressive Modulus	psi	D695	-
Hardness Rockwell	-	D785	M74 / R109
Izod Impact Notched	ft-lb/in	D256	1.5

Thermal Properties	Units	Test	ESd 225
Coefficient of Linear Thermal Expansion	X 10 ⁻⁵ in./in./°F	D696	9.3
Heat Deflection Temperature	@264 psi °F/°C	D648	225 / 107
Melting Temperature	°F/°C	D3418	- / -
Max. Operating Temperature	°F/°C	-	180 / 82
Thermal Conductivity	BTU- in/ft ² -hr.-°F x 10 ⁻⁴ cal/cm-sec-°C	C177	- -
Flammability Rating	-	UL94	HB

Electrical Properties	Units	Test	ESd 225
Dielectric Strength	(V/mil) short time, 1/8" thick	D149	275
Dielectric Constant	@1 KHz	D150	4.3
Surface Resistivity	Ohms/Square	EOS/ESD S11.11	10 ⁹ - 10 ¹⁰
Max Static Decay	sec	Mil-B-81705C	-

**The information provided in this table is a compilation of publicly available data. This information is provided for comparison purposes only, and is not intended to be warrantable. Further, Technical Products, Inc. disclaims any and all liability from errors, in accuracies, or omissions.