



** SEMITRON® is the registered trademark of

**MITSUBISHI CHEMICAL
ADVANCED MATERIALS**

PRODUCT CAPABILITIES:

- Sheet : 250 x 250mm
500 x 500mm
- Thickness : 1mm, 2mm, 3mm, 3.5mm,
4mm, 5mm, 6mm, 8mm, 10mm, 12mm

ADVANTAGES:

- Very Low moisture absorption
- Excellent Dimensional Stability
- Good Impact Strength, Stiffness
and Minimum Levels of Creep.
- Excellent Machinability for Tighter Pitch
and Fine Diameter Holes.
- Low CLTE means parts stay in
specification.

PRODUCT COLORS:

- Grey

APPLICATIONS INCLUDE:

- Tests Sockets for the semiconductor
manufacturing industry
- Fixtures for electronics testing
- Mounting points for precision diagnostic
equipment
- Mounting points for precision diagnostic
equipment
- Positioning platforms for miniature motion
control devices

GENERAL PROPERTIES	ASTM or UL Test	SEMITRON® MDS 100 Typical Values
PHYSICAL		
Specific Gravity (g/cm ³)	D792	1.51
Water Absorption, 24 hrs (%)	D570	0.10
MECHANICAL		
Tensile Strength (psi)	D638	14,700
Tensile Modulus (psi)	D638	1,500,000
Tensile Elongation at Break (%)	D638	1.5
Flexural Strength (psi)	D790	20,500
Flexural Modulus (psi)	D790	1,420,000
Compressive Strength (psi)	D695	24,400
IZOD Notched Impact (ft-lb/in)	D256	–
Rockwell R Hardness	2240	121
THERMAL		
Coeff. of Thermal Expansion (μin./in./°F)	E-831 (TMA)	11
Heat Deflection Temp (°F / °C) @ 264 psi	D648	410 / 210
Melting Point (°F / °C)	D3418	635 / 335
Glass Transition Temp (°F / °C)	–	–
Thermal Conductivity (BTU-in/ft ² -hr-°F)	–	1.73
Flammability Rating	UL94	V-0
ELECTRICAL		
Electric Strength (V/mil)	D149	–
Dielectric Constant at 1MHz	D150	3.37
Dissipation Factor at 1MHz	D150	0.007
Surface Resistivity (ohm)	ANSI / ESD STM 11.11	10 ¹³