

## CVD SiC (Silicon Carbide) Datasheet

### Physical Properties:

		Units	Value	Testing Methods
<b>Mechanical</b>	Bulk Density	g/cc	3.21	-
	Vickers Hardness	-	2800	ASTM C1327
	Flexural Strength	Psi (MPa)	20° C -54,000 (370) 1300° C -81,000 (560)	ASTM C1161
	Fracture Toughness	MPa- m <sup>1/2</sup>	2.94	Vickers Indentation
<b>Thermal</b>	Thermal Conductivity (20°C)	W/m-C	250	ASTM E1461
	CTE (-40° to 950° C)	ppm/°K	4.5	ASTM E228
<b>Electrical</b>	Electrical Resistivity (20°C)	Ohm-cm	>1	Van der Pauw
	Specific Heat	J/m-K	0.66	

\*Please note that these are typical properties and may vary.

### Typical Applications:

- Rapid Thermal Process (RTP) components
- Plasma Etch components
- Susceptors and Heating elements
- LED wafer carriers and cover plates
- Sputtering Targets

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