

## CORDIERITE SPECIFICATIONS

	Property	ASTM Method	Units	Cordierite
General	Color	--	--	Orange-Tan
	Gas Permeability	--	atms-cc/sec	Porous
	Water Absorption	C 20-97	%	10
Mechanical	Density	C 20-97	g/cc	2.00
	Hardness	Vickers 500 gm	GPa (kg/mm <sup>2</sup> )	5.8 (590)
	Hardness	--	R45N	50
	Flexural Strength (MOR) (3 point) @ RT	F417-87	MPa (psi x 10 <sup>3</sup> )	66 (9.5)
	Tensile Strength @ RT	--	MPa (psi x 10 <sup>3</sup> )	19 (2.7)
	Compressive Strength @ RT	--	MPa (psi x 10 <sup>3</sup> )	165 (24)
	Elastic Modulus	C848	GPa (psi x 10 <sup>6</sup> )	103 (15)
Poisson's Ratio	C848	--	0.31	
Thermal	C.T.E. 25 - 100° C	C 372-96	x 10 <sup>-6</sup> /C	2.1
	C.T.E. 25 - 300° C	C 372-96	x 10 <sup>-6</sup> /C	2.5
	C.T.E. 25 - 600° C	C 372-96	x 10 <sup>-6</sup> /C	3.0
	Thermal Conductivity @ RT	C 408	W/m K	3
	Max Use Temp	--	Fahrenheit (°F)	2350
--		Celsius (°C)	1290	
Electrical	Dielectric Strength (.125" Thick)	D 149-97A	V/mil	120
	Dielectric Constant @ 1 MHz	D 150-98	--	5.5
	Volume Resistivity, 25°C	D 257	ohms-cm	> 1 x 10 <sup>14</sup>