

## STEATITE SPECIFICATIONS

STEATITE C220		
FEATURE	VALUE	UNIT OF MEASUREMENT
<b>MECHANICAL PROPERTIES</b>		
Chemical impurities	Alkali Free	-
Colour	Off white	-
Specific gravity	2.75	g/cm <sup>3</sup> [ Mg · m <sup>3</sup> ]
Water absorption	0.00	%
Compressive strength	5 000 ( 500 )	kG/cm <sup>2</sup> ( MPa )
Flexural strength	1 400 ( 140 )	kG/cm <sup>2</sup> ( MPa )
Young's modulus	1.00	kG/cm <sup>2</sup> · 10 <sup>3</sup> ( MPa · 10 <sup>2</sup> )
Hardness	7 + 8	Mohs - Scale
<b>THERMAL PROPERTIES</b>		
Coeff. of thermal expansion	8-9 x 10 <sup>-6</sup>	1/°C
Resistance to thermal shock (down shock ΔT)	200	°C
Thermal conductivity ( 20 °C )	2.3 + 2.5	W / m · °C
Safe operating temperature	1 050	°C
Max. withstanding temp.	1 250	°C
<b>ELECTRICAL PROPERTIES</b>		
Dielectric strength	15 + 18	kV / mm
Withstand voltage	> 30	kV
Surface resistivity min.	10 <sup>10</sup>	Ω
Volume resistivity ( 20°C )	10 <sup>13</sup>	Ω · cm
<b>CHEMICAL COMPOSITION</b>		
SiO <sub>2</sub>	58-60	%
Al <sub>2</sub> O <sub>3</sub>	6 - 8	%
Fe <sub>2</sub> O <sub>3</sub>	< 1	%
TiO <sub>2</sub>	< 1	%
CaO	< 1	%
MgO	26 + 28	%
Na <sub>2</sub> O	< 1	%
K <sub>2</sub> O	< 1	%
BaO	2 + 3	%