

TERMINAL BLOCKS CERAMICS SPECIFICATION

FEATURE	VALUE		UNIT
	STEATITE C220	CORDIERITE C420	
PHYSICAL PROPERTIES			
Chemical impurities	Alkali Free	Contained	-
Colour	Off white	White	-
Specific gravity	2.75	2.3	g/cm ³
Water absorption	0.00	0.00	%
Compressive strength	5 000	2 000	kG/cm ²
Flexural strength	1 400	600	kG/cm ²
Young's modulus	1.00	0.75	kG/cm ² • 10 ⁶
Hardness	7 + 8	6 + 6.5	Mohs - Scale
THERMAL PROPERTIES			
Coeff. of thermal expansion (30 + 600°C)	8+9 × 10 ⁻⁶	2+4 × 10 ⁻⁶	1/°C
Thermal shock Resistance (Down Shock ΔT)	200	250	°C
Thermal conductivity (20°C)	2.3 + 2.5	1.2 + 2.5	W/ m • °C
Safe operating temperature	1 050	400	°C
Max. withstanding temp.	1 250	600	°C
ELECTRICAL PROPERTIES			
Dielectric strength	15 + 18	10	kV / mm
Withstand voltage	>30	30	kV
Surface resistivity min.	10 ¹⁰	-	Ω
Volume resistivity (20°C)	10 ¹³	10 ¹⁰	Ω • cm
Dielectric constant (20°C)	-	6	MHz
CHEMICAL COMPOSITION			
SiO ₂	58 + 60	60	%
Al ₂ O ₃	6 + 8	30	%
Fe ₂ O ₃	<1	<1	%
TiO ₂	<1	<1	%
CaO	<1	<1	%
MgO	26 + 28	3 + 5	%
Na ₂ O	<1	2 + 3	%
K ₂ O	<1	2 + 3	%
BaO	2 + 3	<1	%