SO210O

2023.04.03

SPECIFICATIONS

- Chemical formula: $MgO\ SiO_2$
- Chemical name: Steatite
- Appearance: Dense sintered steatite
- Main characteristics: Thermal Insulator
- Main applications: Various Circuit Parts
- Colour: White

MECHANICAL & PHYSICAL CHARACTERISTICS (TYP.)

Density		[g/cm³]	JIS R 1634	2.8
Water absorption		[%]	JIS C 2141	0
Vickers hardness HV9.807N		[GPa]	JIS R 1610	5.8
Flexural strength 3 P.B.		[MPa]	JIS R 1601	190
Compressive strength		[MPa]	JIS R 1608	-
Young's modulus of elasticity		[GPa]	JIS R 1602	120
Poisson's ratio		[-]	JIS R 1602	0.22
Fracture toughness (SEPB)		[MPa*m$^{0.5}$]	JIS R 1607	-
Coefficient of linear thermal expansion	**40 - 400 °C** **40 - 800 °C**	[*10^{-6}/K]	JIS R 1618	7.7 8.0
Thermal conductivity		[W/(m*K)]	JIS R 1611	2
Specific heat capacity		[J/(g*K)]	JIS R 1611	0.75
Thermal shock temperature difference		[°C]	JIS R 1648	-
Dielectric strength		[kV/mm]	JIS C 2141	18
Volume resistivity	**20 °C** **300 °C** **500 °C**	[Ω*cm]	JIS C 2141	>10^{14} 10^{10} 10^{7}
Dielectric constant		-	JIS C 2141	6
Dielectric loss angle		[*10^{-4}]	JIS C 2141	18
Loss factor		[*10^{-4}]	JIS C 2141	108

The values are typical material properties and may vary according to products configuration and manufacturing process.
For more details, please feel free to contact us.

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