

Oxide/oxide ceramic matrix composite “Keramiklech”, standard material SvM for applications up to 950°C

Keramiklech Type, old name	SvM1514N/ SvM-Alu	
Keramiklech Type, new name	SvM	test standard
Fibre (Fabric)	Silika	–
Matrix	65% Al ₂ O ₃ 35% SiO ₂	–
Thickness per layer [mm]	0,75	–
Density [g/cm ³]	1,5	–
Bending strength [MPa] anisotrop 0/90° at room temperature	20-30	DIN 658-3, 3 point bending
Tensile strength [MPa] at 1000 °C	–	DIN 658-1
Thermal expansion coefficient [10 ⁻⁶ 1/K]	2	DIN 1159-1
Thermal conductivity [W/mK]	< 1	DIN 1159-2
Recommended continuous service temperature [°C]	< 950 °C	–
Recommended continuous service temperature [°C] with mechanical load	< 900 °C	–
Maximum continuous service temperature [°C] with high mechanical load	< 900 °C	–