

Item		Unit	SKT-ND70	SKT-NC100	SKT-EC90	AlN	ZrO2(Y)	99.5%Al2O3	
颜色/Color		-	Black	Black	Gray	Gray	White	Yellow	
密度/Bulk Density		g/cm ³	≥3.24	≥3.26	≥3.22	3.30	≥6.02	≥3.92	
力学性能 /Mechanical Characteristics	维氏硬度/Vickers Hardness (Load 500g)	MPa	≥14.8	≥15.00	≥13.5	≥10.0	≥13.0	≥18	
	抗弯强度/Flexural Strength	MPa	≥750	≥900	≥680	≥350	≥950	≥350	
	断裂韧性/Fracture Toughness	MPa·m ^{1/2}	≥6.2	≥6.5	≥6.2	--	6-7	4-5	
	杨氏模量/Young's Modulus of Elasticity	GPa	290	300	300	320	210	360	
	泊松比/Poisson's Ratio	--	0.28	0.28	0.28	0.24	0.31	0.23	
电学性能 /Electrical Characteristics	介电常数/Dielectric constant(1MHz)	--	9.6	9.6	9.6	9.0	--	9.8	
	介电损耗/ Loss Tangent	(×10 ⁻⁴)	19	19	19	5	--	1	
	介电强度/Dielectric Strength	KV/mm	≥15	≥15	≥15	≥15	--	≥17	
	电阻率/Volume Resistivity	Ω·cm	≥10 ¹⁴	≥10 ¹⁴	≥10 ¹⁴	≥10 ¹⁴	--	≥10 ¹⁵	
热学性能 /Thermal Characteristics	热导率 Thermal Conductivity	W/(m·K)	25	25	90	180	3	30	
	热膨胀系数/ Coefficient of Linear Thermal Expansion	×10 ⁻⁶ /°C	3.3	3.3	3.3	4.8	10.0	0.8	
	抗热震性/ Thermal Shocking Resistance	°C	800	800	800	--	--	220	
	比热/ Specific Heat	J/(Kg·K) ×10 ³	0.66	0.66	0.66	0.74	0.46	0.8	
化学性能 /Chemical Characteristics	耐硝酸/ Nitric Acid(60%)	90 °C	WT Loss (mg/cm ² /day)	<1.0	<1.0	<1.0	--	0	--
	耐硫酸/ Sulphuric Acid(95%)	95 °C		<0.40	<0.40	<0.40	--	<0.04	--

	耐碱(30%)	80 °C		< 0.36	<0.36	<0.36	--	<0.08	--
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