## ATCERA Advanced&Technical Ceramic

Material	Aluminum Oxide(Al2O3)			
	96% AI2O3	99% AI2O3	99.9% Al2O3	99.99% Al2O3
Density (g/cm3)	≧ 3.68	≧3.83	3.94	3.98
Flexture strength (MPa)	300	310	315	320
Young Modulus (GPa)	360	360	359	362
Poisson's ratio	0.24	0.23	0.22	0.22
Compressive strength (MPa)	2000	2200	2558	2570
Hardness (HV)	1380	1650	1700	1770
Fracture toughness (MPa*m <sup>1/2</sup> )	4.2	4.2	4.2	4.3
Maximum working temperature (℃)	1600	1600	1770	1800
Thermal conductivity (W/m*K)	21	24	≧35	≧36
Thermal expansion coefficient (/℃)	7*10 <sup>-6</sup>	7*10 <sup>-6</sup>	7.1*10 <sup>-6</sup>	7.2*10 <sup>-6</sup>
Thermal shock resistance (ΔT ℃)	200	200	225	228

<sup>\*</sup> The actual product may have slight differences due to factors such as the composition of the raw material, molding and sintering process, etc.