

#### Challenge the next generation with ceramics!

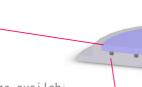
## **Porous Chuck**

ultimate flat surface.



Various available option
The following material, pore size and
porocity are available.

- Material Al<sub>2</sub>O<sub>3</sub>, SiC
- Pore size 5, 10, 30, 70  $\mu$  m
- Porocity: 30~60%



ODesign flexible

Both square and circle design are available.

Any inside tunnel pattern is available.





Bonding strength between porous ceramics and retaining body is more than mechanical strength of porous ceramics.

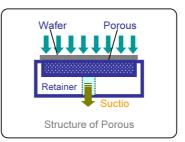
### [Characteristics]

Material	A1203		SiC	
	Porous	Retainer	Porous	Retainer
Specific gravity	2.5	3.9	2.1	3.1
Bending Strength (MPa)	50	410	50	500
Young's modulus (GPa)	55	380	55	410
CTE (/°C)	7.4 × 10 <sup>-6</sup>	7.6 × 10 <sup>-6</sup>	4.7 × 10 <sup>-6</sup>	4.6 × 10 <sup>-6</sup>
Thermal Conductivity (W ∕ m ⋅ K)		30	_	150
Volume Resistivity (Ω • cm)	1011	> 10 <sup>14</sup>	106	106

#### [Application]

- O Fixture of grinding Si Wafer (Dicing saw, Grinder, Polisher)
- O Glass substrate carrier for LCD
- O Fixture for various test equipment
- O Fixing film sheet or metal substrate

# [Example]



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