

## MC Machinable Ceramics characteristics table

Material	Photoveel	Photoveel II	Photoveel $\alpha$ 3.4	Photoveel II-S	Photoveel II-S Black	Photoveel $\alpha$ 5	Photoveel II-k70
Density (g/cm <sup>3</sup> )	2.59	2.56	3.35	3.5	3.5	3.7	2.72
Water Absorption (%)	0	0	0	0	0	0	0
Bending strength (MPa)	150	440	340	320	320	325	520
Young's modulus (GPa)	66	157	140	130	130	130	200
Vickers Hardness (GPa)	2.2	2.3	2.3	2.3	2.3	2.6	4
Volume Resistivity ( $\Omega \cdot \text{cm}$ )	10 <sup>15</sup>	10 <sup>15</sup>	10 <sup>15</sup>	10 <sup>15</sup>	10 <sup>14</sup>	10 <sup>15</sup>	10 <sup>15</sup>
Max. Operating Temperature (°C)	1000	1000	1000	1000	1000	1000	1000
Average Coefficient of Thermal Expansion (1x10 <sup>-6</sup> /K)	7.8 RT-400°C	0.9 RT-150°C	3.4 RT-150°C	4.7 RT-150°C	4.7 RT-150°C	5.2 RT-150°C	1 RT-150°C
Coefficient of Thermal Conductivity (W/m·k)	1.5	50	30	23	23	21	70
Dielectric Constant	<1MHz> 6.4	<1GHz> 5.5	<1GHz> 8.5	<1GHz> 9.0	<1GHz> 9.0	-	<1GHz> 6.0

\*Individual measured values are not guaranteed values. Please use them for reference purposes only.