Machinable Ceramics

Machinable Ceramics is available for minute processing.

Macerite, Macor, Photoveel, BN, SHAPAL Hi M-soft

We have the relations with many ceramics processors. We can send ceramics artefact in the most suitable material on short delivery date.









Typical applications for Machinable Ceramics include laser applications - spacers, reflectors and cavities in laser assemblies; electronics/semiconductors - precision coil formers and high voltage insulators; high vacuum applications - thermal breaks in high temperature processing equipment, vacuum feed-throughs and coil supports; nuclear industry - reference blocks and fixtures in power generation units; and aerospace/space industry - retaining rings on doors, windows and hinges of NASA's Space Shuttle supports and components in a number of satellite borne systems.

Advanced Ceramics Characteristics													
	Model	Density	Bending	Coefficient	Hardness	Facture	Coefficient	Thermal	Coefficient	Electrical	Dielectric	Dielectric	Dielectric
	number		strength	of elasticity		toughness	of thermal	shock	of thermal	resistance	strength	constant	loss
							expansion	resistance	conductivity				
unit		g/cm ³	Mpa	GPa	GPa	MPa√m	x10 ⁻⁶ /K	К	W/m·K	Ω·cm	kV/mm		x10 ⁻³
Alumina (Al ₂ O ₃)	LA995	3.9	450	390	18	4	7.3	200	30	>10 ¹⁴	12	10	30
Zirconia (ZrO₂)	LZR-3Y	6	1000	200	13	6	7.5	200	30	>10 ¹⁴	12	10	3
Silicon carbide (SiC)	LSC01	3.1	490	430	24	3	3.1	450	140	104	-	-	-
Silicon nitride (Si₃N₄)	LSN02	3.2	800	290	14	6	1.6	700	24	>10 ¹⁴	>10	8	3
Aluminum nitride (AIN)	LAL-3Y	3.3	350	320	13	3	4.5	400	170	>10 ¹³	15	8.8	5
Macerite SP	M-SP	2.5	110	64	2.2	-	9.3	150	1.6	>10 ¹⁵	10	6	8
Macerite HSP	M-HSP	2.67	160	65	2.2		9.8	175	1.6	>10 ¹⁵	>10	6.5	3
Macor	мс	2.5	94	66.9	2.2	-	9.3	200	1.4	>10 ¹⁶	10	6.8	10
Photoveel	PV-N	2.6	150	66	2.2		8.5	150	1.5	>1015	20	6.4	6
L-TEX (Zrcon Cordierite)	L-TEX	2.7	150	-	-	-	2.5	150	1.2	>10 ¹³	10	6.5	-
(BN)	BN-N-1	1.8	30	10	0.8	-	-1.8	1500	63	>10 ¹⁵	19	4.5	9
SHAPAL Hi M-soft (AIN+BN)	S-HMS	2.88	300	177	3.7	-	4.8		92			6.8	

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Notice; The number mentioned above is not a guara tee level.

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