

POLYCRYSTAL

the new world of ceramics



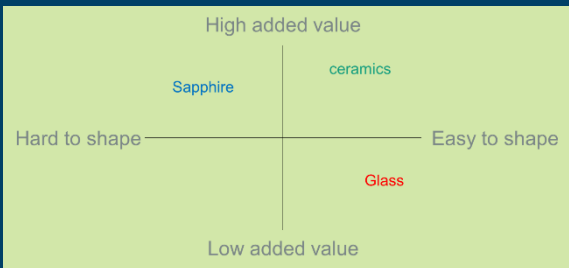
- Sintered 100 % dense
- harder than sapphire
- unique colors
- innovative shaping by new gelcasting process
- polycrystalline YAG, CZ, Spinel, Sapphire
- fluorescent ceramics



Services:

- molded parts for technical and design applications
- ultrapure substates and wafer
- prototypes from 1 pcs
- development of specific colors
- consulting and R&D projects

	Glass		Single crystal	POLYCRYSTAL -Ceramics			
	Glass	Glass-ceramics	sapphire	MgAl ₂ O ₄	Al ₂ O ₃	ZrO ₂	Y ₃ Al ₅ O ₁₂
Density [g/cm ³]	2.6	2.6	4.0	3.6	4.0	5.8	5.6
Index of refraction	1.5 – 1.8	1.5	n _o 1.76 n _e 1.75	1.7	1.76	2.1	1.8
Max. Transmission [%] <small>about 100% with AR-coating</small>	90	90	84	86	70	70	82
Hardness HV1	3-6	4-7	14-15	14	18	12	12
Bending strength [MPa]	20-40	40-60	300-700	150	600	220	250
Young's Modulus [GPa]	70	90	345	270	390	200	280



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