

ZIRCONIA CHARACTERISTICS

<u>PROPERTIES</u>			<u>ZIRCONIA</u>
BRAND AND CODES			SZY-H
APPARANCE			DENSE
CHEMICAL COMPOSITION			ZrO ₂ (Y ₂ O ₃)
BULK DENSITY		g/cm ³	6.05
APPARENT POROSITY		%	0.5>
MODULUS OF RUPTURE, RT		MPa	1080
YOUNG'S MODULUS		GPa	205
POISSON'S RATIO			0.31
HARDNESS, Hv		GPa	12.3
FRACTURE TOUGHNESS		MPa√m	6.0
THERMAL EXPANSION COEFFICIENT		x10 ^{-6/K}	10.5
THERMAL CONDUCTIVITY RT		W/m.K	3.8
THERMAL SHOCK RESISTANCE ΔT		°C	
DIELECTRIC STRENGTH		KV/m	
ELECTRICAL RESISTIVITY	200 °C 50° C	Ω·cm	10 ¹²
DIELECTRIC CONSTANT, 1 MHz			15.0