

# Polycrystalline Ruby (Hipped)

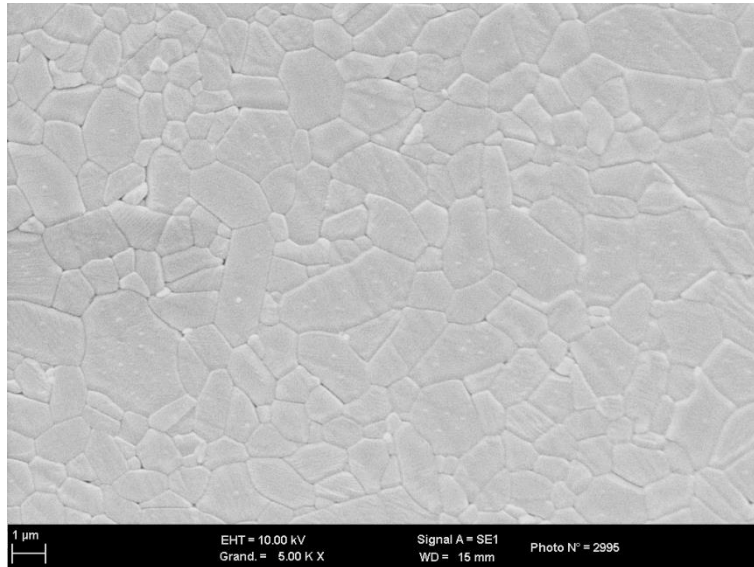
CHEMICAL COMPOSITION	Al <sub>2</sub> O <sub>3</sub>	98-99%wt	* by difference
	Cr <sub>2</sub> O <sub>3</sub>	1-2%wt	
	Na <sub>2</sub> O	<0.1%	
	SiO <sub>2</sub>	<0.1%wt	
	Fe <sub>2</sub> O <sub>3</sub>	<0.1%wt	
	CaO	<0.1%wt	

PHYSICAL PROPERTIES	Mean grain size	3±1 µm
	Sintered density	3.99 g/cm <sup>3</sup>
	Bending strength at 20° C	600 MPa
	Hardness H <sub>v0.5</sub>	2000 Hv

THERMAL PROPERTIES	Thermal conductivity at 20°C	30 W.m <sup>-1</sup> .k <sup>-1</sup>
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ELECTRICAL PROPERTIES	Dielectric constant at 25°C-1MHz	-
	tan δ	-
	DC Volume resistivity at 25°C	-
	Dielectric strength at 3mm	-

## MICROSTRUCTURE



KEY FEATURES	High translucency and hardness
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TYPICAL APPLICATIONS	Watch movement parts, insulators for medical devices.
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