

# FUNCTIONAL EXPLORE



- Suitable for all indications

## • Physical Characteristics

Density after sintering	$\geq 6.0 \text{g/cm}^3$
CTE(25-500°C)	$(10.5 \pm 1.0) \times 10^{-6} \text{K}^{-1}$
Accelerated aging surface monoclinic phase content	<5%
Chemical solubility after sintering	<100 $\mu\text{g/cm}^2$
Radioactivity	<0.1Bq/g
Sintering temperature	1430-1550°C recommend 1480°C

## • Chemical Composition

ZrO <sub>3</sub> +HfO <sub>2</sub> +Y <sub>2</sub> O <sub>3</sub>	>96.5%
Y <sub>2</sub> O <sub>3</sub>	5.8%-9.7%
Al <sub>2</sub> O <sub>3</sub>	<0.5%
Fe <sub>2</sub> O <sub>3</sub>	<0.5%
Er <sub>2</sub> O <sub>3</sub>	<2.0%
Others oxides	<0.5%

Light    1027MPa    46.6%    4.3MPa · m<sup>1/2</sup>



Dark



1300MPa



43%



5.1MPa · m<sup>1/2</sup>

