



	Units	Oxide Bonded SiC	SiSiC (RBSiC)	NbSiC	ReSiC	Sintered SiC
Max use temperature	°C	1400	1380	1450	1650	1600
	°F	2550	2500	2650	3000	2900
Density	g/cm <sup>3</sup>	2.7	3.1	2.8	2.7	3.1
Open porosity	%	8	<0.5	<1.0	15	<0.5
Bending strength	MPa	35	250	160	90	400
Modulus of elasticity	GPa	200	325	200	250	425
Thermal conductivity	W/mK	15	45	15	25	70
Coefficient of thermal expansion	x10 <sup>-6</sup> /K	4.5	4.5	5	4.8	4

## High Performance Silicon Carbide

IPS Ceramics supplies the most competitive and technically-proven range of silicon carbide products from Oxide Bonded to Silicon Infiltrated.

Silicon Carbide has excellent load-bearing ability at higher temperatures, and is often the first choice for applications in the range of 1300°C (2400°F) to 1650°C (3000°F).