

# Material Grade Chart

## Silicon Carbide Grades

Item	Unit	RSIC	SSIC
Silicon Carbide Purity	%	≥90	≥99
Density	g/cm <sup>3</sup>	≥3.03	3.10~3.15
Hardness	HRA	≥92.0	≥94.0
Indicated Porosity	%	<0.2	<0.2
Compressive Strength	MPa	≥2000	≥2200
Flexural Strength	MPa	≥350	≥400
Elastic Modulus	GPa	350	400
Thermal Conductivity	W/m•k	50~110	90~110
Maximum Use Temperature	°C	1000	1600
Coefficient of Heat Expansion	10 <sup>-6</sup> •1/°C	4	4
Sintering Type		Reaction Sintering (RSIC)	Pressureless Sintering (SSIC)

### Remark

- Other silicon carbide special grades to meet specific customer requirements are also available.