SiC / Carborundum material

OS-1: Alpha sintered Sic Purity>98%,Relative density>96%. High Wear Resistance, High Corrosion Resistance, High Heat Resistance, Produced in the common method of Powder Metallurgy, Best performance as pure chemical compound, Most ideal for mass production on high volume.	
OS-2: Reaction bonded Sic High Thermal Conductivity, High thermal shock Resistance, Electric discharge processable conductivity.	
OS-3: Graphite Loaded / Unique chemical processing High Thermal Shock Resistance, High Self Lubricity, Ideal for parts in complex shapes.	

X200

TECHANICAL PROPERTY DATA SHEET

	OS-1	OS-2	OS-3
Process	Alpha sintered SiC	Reaction bonded SiC	Unique chemical processing
Content(wt%)	SiC - 98%	SiC - 12%Si	SiC - 30%~40%C
Gravity	3.1	3.05	2.3
Hardness	Hs120	Hs110	Hs90
	Hv2400	Hv1700	
Bending Strength	490	392	127
Flexural Strength (Gpa)	360	350	25
Poisson's Ratio	0.20	0.20	0.20
Fracture Toughness (MN/m)	2.4	2.8	
Thermal Conductivity (W/m. K)	147	151	38
Thermal Expansion Coeff. (1/ L)	$3.5X10^{-6}$	$3.1X10^{-6}$	$3.2X10^{-6}$
	(RT~400 L)	(RT~400 L)	(RT~400 L)
Heat Resistance (in the air)	1600 L	1400 L	400 L
Thermal Shock Resistance3TMM	200 L	250 L	400 L

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