

TECHNICAL DATA

Material	C221	C410	C530	C610
	Steatite	Cordierit		Mullite
Al ₂ O ₃ (%)	6	2Mgo2Al ₂ O ₃ 5SiO ₂	≥72	≥60
SiO ₂ (%)	< 58	-	< 22	< 34
Fe ₂ O ₃ (%)	0.2	-	< 0.15	< 0.15
Alkaline Substances(%)	-	-	< 2.5	< 3
Density(g/cm ³)	2.7	2.1	2.5	2.7
Hardness(Mohs)		-	6	8
Flexural strength(Mpa)	140	60	30	120
Compressive strength(Mpa)	850	300	-	550
Modulus of elasticity(Gpa)	110	-	-	100
Impact resistance(Mpa m ^{1/2})	-	-	-	-
Webull modulus(m)	-	-	-	-
Vickers hardness(HV0.5)	7	7	-	-
Thermal expansion coefficient(10 ⁻⁶ k ⁻¹)	8	2-4	4-6	6
Thermal conductivity(W.mK)	2-3	1.2-2	1.5-2	3-5
Thermal shock resistance (°C)	100-150	250	350	150
Volume resistivity at 30°C (Ωcm)	10 ¹¹	10 ¹²	-	10 ¹¹
Dielectric strength(kv/mm)	20	10	-	17
Operating temperature in short time(°C)	1200	1200	1600	1550
Operating temperature in long time(°C)	1000	1100	1500	1450
color	White	Yellow	White	White

Lonci Group Co.,Ltd

Room A205 ,NO.66 ShaHe RD , Jiading District , ShangHai , 201803 , China
 Fax : +86 21 6414 9397 Tel :+86 21 6414 6996 0802 Mob : +86 15001959760
 Email: lance@lonci-group.com Web: www.loncigroup.com



Material	85 Series	95 Series	99 Series	997 Series	Zr ₂ O ₃ Y-PSZ	Al ₂ O ₃ +Zr ₂ O ₃
Al ₂ O ₃ (%)	≥85	≥95	≥99	≥99.7		
SiO ₂ (%)	<12	≤2.3	<0.2	<0.04	<0.2	<0.04
Fe ₂ O ₃ (%)	<0.5	<0.1	<0.1	<0.05	<0.1	<0.05
Alkaline Substances(%)	<2.5	<0.1	<0.1	<0.08	<0.1	<0.08
Density(g/cm ³)	3	3.7	3.87	3.89	3.87	3.89
Hardness(Mohs)	7	8.8	9	9	9	9
Flexural strength(Mpa)	230	300	340	390	1000	600
Compressive strength(Mpa)	1800	3400	3600	3900	3000	3600
Modulus of elasticity(Gpa)	100	350	380	390	205	350
Impact resistance(Mpa m ^{1/2})	3	4.0	5.0	5.2	8	7.5
Webull modulus(m)	6	10	10	12	22	18
Vickers hardness(HV0.5)	1600	1800	1900	2000	1300	1600
Thermal expansion coefficient(10 ⁻⁶ k ⁻¹)	6	5.0-8.3	5.4-8.3	5.5-8.4	10	6.0-8.6
Thermal conductivity(W.mK)	5	24	27	28	<2	18
Thermal shock resistance (°C)	150	250	270	280	270	320
Volume resistivity at 20°C (Ωcm)	>10 ¹⁴	>10 ¹⁴	>10 ¹⁴	>10 ¹⁵	>10 ¹⁰	>10 ¹³
Dielectric strength(kv/mm)	17	20	25	30		
Operating temperature in short time(°C)	1400	1650	1800	1850		
Operating temperature in long time(°C)	1300	1530	1650	1700		
color	white	pink,white	white,ivory	ivory		