

Magnetic Properties of Chilisin Materials

Property	Unit	Symbol	A	B	A ₃	B ₂₄₆	B ₃₁₉	D ₂	E ₁	O ₁	K	X ₁₂₉	Y ₄	Y ₇
Initial Permeability		μi	180	900	190	1500	1800	60	15	450	200	500	100	300
Maximum Permeability			525	1270	3700	2750	3025	180	20	680	220	1220	610	850
Saturation Flux Density @H	Gauss		3800 @20	2400 @10	3350 @10	2900 @10	2280 @3	2800 @25	1700 @100	2100 @20	2400 @25	3350 @10	3650 @20	2800 @10
Coercive Force	Oersteds		2.1	0.3	0.486	0.2	0.255	4.4	29	0.8	1.9	0.7	1.7	0.8
Residual Flux Density	Gauss		1800	850	2050	1450	1245	1200	1080	1100	630	2100	2200	1440
Curie Temperature	°C		300	140	180	175	150	300	300	150	175	220	300	175
Volume Resistively	OHM-CM		10 ⁷	10 ⁷	10 ⁷	10 ⁷	10 ⁷	10 ⁷	10 ⁷	10 ⁷	10 ⁷	10 ⁷	10 ⁷	10 ⁷
Practical Frequency Range	MHz		0.4 to 15	0.1 to 0.7	0.4 to 15	0.01 to 0.5	0.01 to 0.4	0.5 to 15	10 to 150	0.01 to 1	0.1 to 2	0.1 to 1	0.5 to 15	0.1 to 1
Specific Gravity	g/cm ³		4.7	4.8	4.8	4.7	4.9	4.7	4.8	4.9	4.8	4.7	4.7	4.7
Loss Factor @MHz	$\frac{1}{mQ}$		1.7×10 ⁻⁴ @1	6.9×10 ⁻⁵ @0.5	1.2×10 ⁻⁴ @0.5	1.2×10 ⁻⁴ @0.5	1.1×10 ⁻⁵ @0.8	7.5×10 ⁻⁵ @5	5.0×10 ⁻⁴ @5	7.5×10 ⁻⁵ @1	5.3×10 ⁻⁵ @1	8.4×10 ⁻⁵ @4	4.0×10 ⁻⁵ @1	3.2×10 ⁻⁵ @1
Temp. Coifs of Initial Permeability	%/°C 20 - 70°C		0.1	0.07	0.35	0.10	0.28	0.30	0.10	0.024	0.20	0.06	0.10	0.20
Lead-free			O	O	O	O	O	X	O	X	X	X	X	X

- Above column has indicated lead-free materials with a "O" and materials contain lead with a "X".
- CHILISIN's lead-free cores could meet SS-00259's criteria for lead-free product.
- The materials with lead will be changed to be lead-free during Q2 of 2004.