



Typical mechanical and thermal properties of soft ferrites:

Property	NiZn	MnZn	Unit
Young's Modulus	90 to 150 13 to 22	80 to 150 12 to 22	N/mm ² x 10 ³ lbs/in ²
Compressive Strength	200 to 600 30 to 90	200 to 700 30 to 101	N/ mm ² x 10 ³ lbs/in ²
Tensile Strength	20 to 65 3 to 9	30 to 60 4 to 9	N/ mm ² x 10 ³ lbs/in ²
Hardness (Knoop)	600 to 700 90 to 100	800 to 900 120 to 130	N/ mm ² x 10 ³ lbs/in ²
Coefficient of Linear Expansion	10 to 12 10 to 12	7 to 8 7 to 8	x 10 ⁻⁶ /°K x 10 ⁻⁶ /°C
Specific Heat	700 to 800 0.17 to 0.19	750 0.18	J/kg/°K cal/g/°C
Thermal Conductivity	3.5 to 5.0 8.4 to 12	3.5 to 5.0 8.4 to 12	x 10 ³ J/mm/sec/°K x 10 ³ cal/cm/sec/°C
Density	~4.6	~4.8	g/cm ³
Permittivity (ε _r) @ Frequency (kHz)			
1	~100		
10	~50		
100		~2 x 10 ⁵	
1 x 10 ³	~25	~1 x 10 ⁵	
1 x 10 ⁴	~15	~5 x 10 ⁴	
1 x 10 ⁵	~12	~1 x 10 ⁴	