

Part Number: 2643540002
Frequency Range: Broadband Frequencies 25-300 MHz (43 material)
Description: CS14/6.4/29-43 43 ROUND CABLE CORE
Application: Suppression Components
Where Used: Cable Component
Part Type: Round Cable EMI Suppression Cores
Preferred Part: ✓

Part Type Information

Mechanical Specifications

Weight: 17.70 (g)

[View Chart Legend](#)

Dim	mm	mm tol	nominal inch	inch misc.	Land Patterns					Winding Information				
					V	W (ref)	X	Y	Z	Turns Tested	Wire Size	1st Wire Length	2nd Wire Length	
A	14.30	±0.45	0.562	—	—	—	—	—	—	—	—	—	—	
B	6.35	±0.25	0.250	—	Reel Information					Pkg Size				
C	28.60	±0.75	1.125	—						—				
D	—	—	—	—	Tape Width mm	Pitch mm	Parts 7" Reel	Parts 13" Reel	Parts 14" Reel	Connector Plate				
E	—	—	—	—	—	—	—	—	—	# Holes	# Rows			
F	—	—	—	—	Cable Information								—	
G	—	—	—	—	Max Diameter	Max Dimension			Solid Equivalent		Flat Cable Cores			
H	—	—	—	—	—	—			—		—			
J	—	—	—	—										—
K	—	—	—	—										—

Electrical Specifications

Typical Impedance (Ω)		Electrical Properties	
10 MHz	105	H(Oe)	.43
25 MHz ⁺	171		
100 MHz ⁺	250		
250 MHz	255		

Ferrite Material Constants

Specific Heat	0.25 cal/g°C
Thermal Conductivity	10x10 ⁻³ cal/sec/cm²°C
Coefficient of Linear Expansion	8 - 10x10 ⁻⁶ /°C
Tensile Strength	4.9 kgf/mm²
Compressive Strength	42 kgf/mm²
Young's Modulus	15x10 ³ kgf/mm²
Hardness (Knoop)	650
Specific Gravity	≈ 4.7 g/cm³
The above quoted properties are typical for Fair-Rite MnZn and NiZn ferrites.	

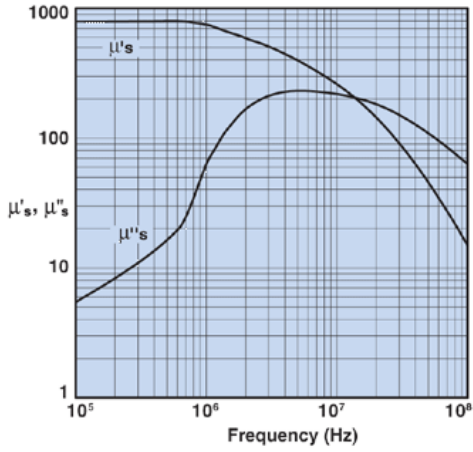
43 Material Specifications:

Property	Unit	Symbol	Value
Initial Permeability @ B < 10 gauss		μ _i	800
Flux Density @ Field Strength	gauss oersted	B H	2900 10
Residual Flux Density	gauss	B _r	1300
Coercive Force	oersted	H _c	0.45
Loss Factor @ Frequency	10 ⁻³ MHz	tan δ/μ _i	250 1.0
Temperature Coefficient of Initial Permeability (20 -70°C)	%/°C		1.25
Curie Temperature	°C	T _c	>130
Resistivity	Ω cm	ρ	1x10 ⁻⁵

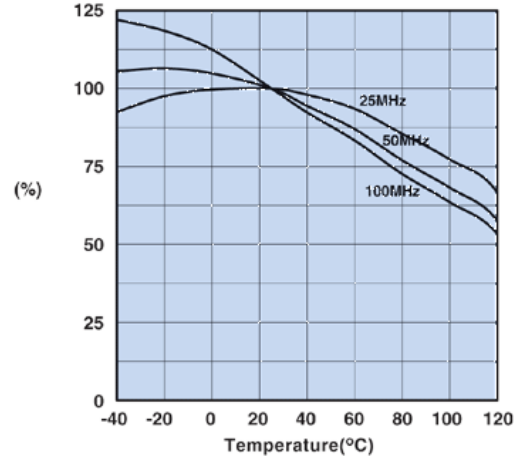
This NiZn is our most popular ferrite for suppression of conducted EMI from 20 MHz to 250 MHz. This material is also used for inductive applications such as high frequency common-mode chokes.

EMI suppression beads, beads on leads, SM beads, multi-aperture cores, round cable EMI suppression cores, round cable snap-its, flat cable EMI suppression cores, flat cable snap-its, miscellaneous suppression cores, bobbins, and toroids are all available in 43 material.

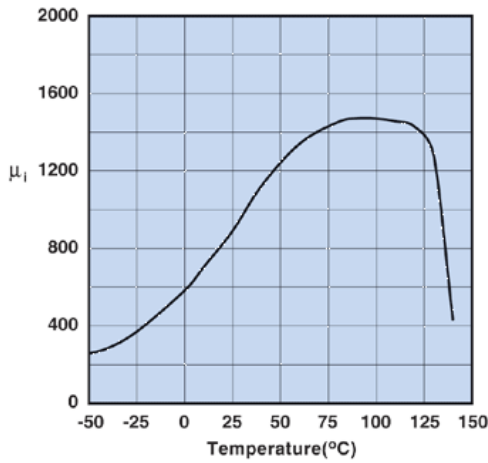
Complex Permeability vs. Frequency



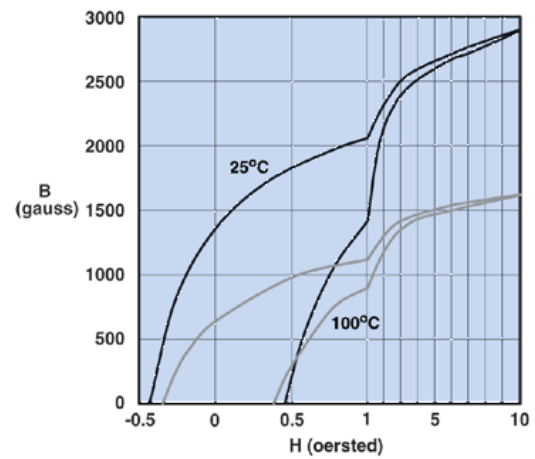
Percent of Original Impedance vs. Temperature



Initial Permeability vs. Temperature

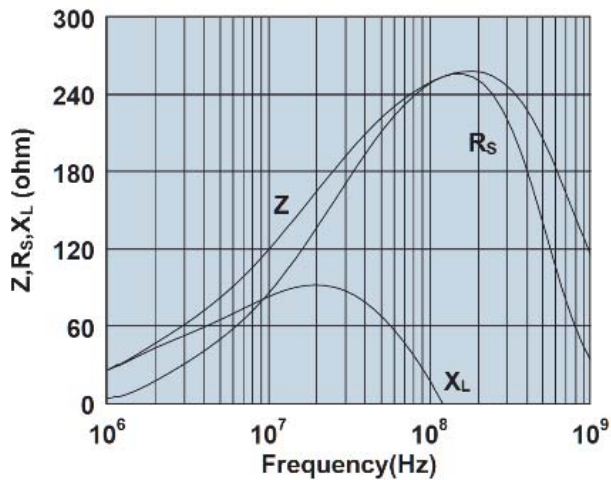


Hysteresis Loop



Impedance Curve

2643540002



Impedance, reactance, and resistance vs. frequency.