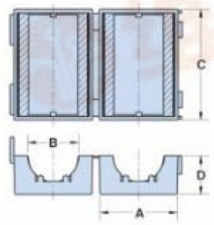


Figure 2

Part Number: 0443167251
Frequency Range: Broadband Frequencies 25-300 MHz (43 & 44 materials)
Description: CSRA22/22/32-43-10 43 ROUND CABLE CORE ASSEMBLY
Application: Suppression Components
Where Used: Cable Component
Part Type: Round Cable Snap-its
Preferred Part: ✓

Part Type Information

Mechanical Specifications

Weight: 42.00 (g)

View Chart Legend

Dim	mm	mm tol	nominal inch	inch misc.
A	22.10	_	0.870	_
B	10.15	_	0.400	_
C	32.30	_	1.272	_
D	11.00	_	0.433	_
E	_	_	_	_
F	_	_	_	_
G	_	_	_	_
H	_	_	_	_
J	_	_	_	_
K	_	_	_	_

Land Patterns				
V	W (ref)	X	Y	Z
_	_	_	_	_

Winding Information			
Turns Tested	Wire Size	1st Wire Length	2nd Wire Length
_		_	_

Reel Information				
Tape Width mm	Pitch mm	Parts 7" Reel	Parts 13" Reel	Parts 14" Reel
_	_	_	_	_

Pkg Size
_

Connector Plate	
# Holes	# Rows
_	_

Cable Information			
Max Diameter	Max Dimension	Solid Equivalent	Flat Cable Cores
9.850 .388	_	2643626402	_

Electrical Specifications

Typical Impedance (Ω)	
10 MHz	79
25 MHz+	138
100 MHz+	225
250 MHz	285

Electrical Properties	
_	_

Ferrite Material Constants

Specific Heat	0.25 cal/g/°C
Thermal Conductivity	$10x10^{-3}$ cal/sec/cm/°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

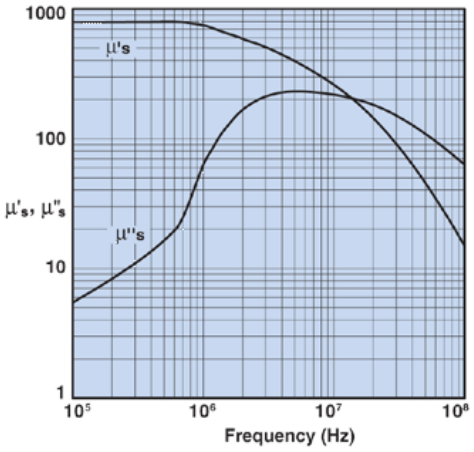
This NiZn is our most popular ferrite for suppression of conducted EMI from 20 MHz to 250 MHz. This material is also used for inductive applications such as high frequency common-mode chokes.

EMI suppression beads, beads on leads, SM beads, multi-aperture cores, round cable EMI suppression cores, round cable snap-its.

suppression cores, bobbins, and toroids are all available in 43 material.

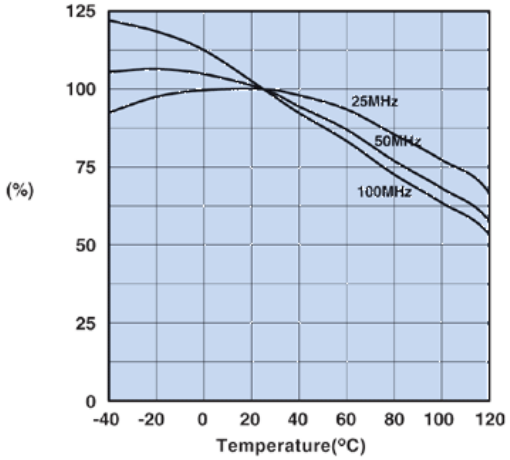
Loss Factor @ Frequency	10^{-6} MHz	$\tan\delta/\mu_i$	250 1.0
Temperature Coefficient of Initial Permeability (20 -70°C)	%/°C		1.25
Curie Temperature	°C	T_c	>130
Resistivity	Ω cm	ρ	$1x10^5$

Complex Permeability vs. Frequency



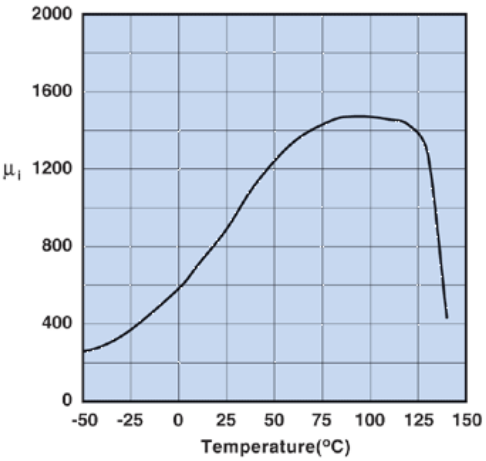
Measured on a 17/10/6mm toroid
using the HP 4284A and the HP 4291A.

Percent of Original Impedance vs. Temperature



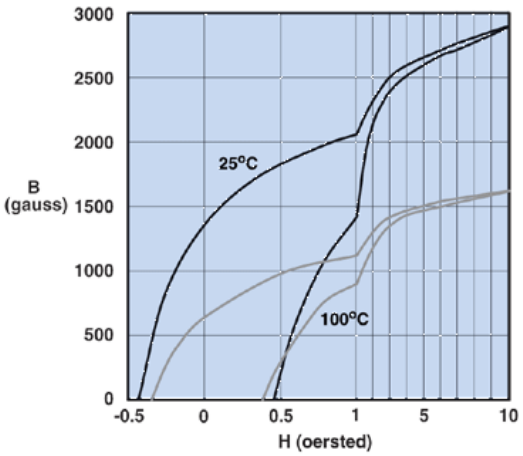
Measured on a 2643000301 using the HP4291A.

Initial Permeability vs. Temperature



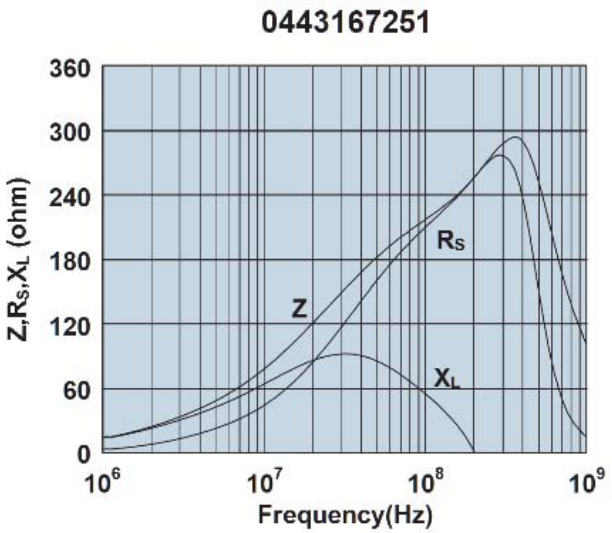
Measured on a 17/10/6mm toroid at 100kHz.

Hysteresis Loop



Measured on a 17/10/6mm toroid at 10kHz.

Impedance Curve



Impedance, reactance, and resistance vs. frequency.

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