

Figure 1

Part Number: 0444167281
 Frequency Range: Broadband Frequencies 25-300 MHz (43 & 44 materials)
 Description: CSRA24/23/39-44-10 44 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: 33.00 (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	23.70	—	0.933	—	—	—	—	—	—	—	—	—	—	
B	10.15	—	0.400	—	Reel Information					Pkg Size				
C	39.40	—	1.550	—						—				
D	11.70	—	0.460	—	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	—	—	—	—	9.850 .388		—		2643626402		—			
J	—	—	—	—										
K	—	—	—	—										

Electrical Specifications

Typical Impedance (Ω)	
10 MHz	77
25 MHz ⁺	125
100 MHz ⁺	210
250 MHz	260

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/mm ²
Compressive Strength	42 kgf/mm ²
Young's Modulus	15x10 ³ kgf/mm ²
Hardness (Knoop)	650
Specific Gravity	≈ 4.7 g/cm ³
The above quoted properties are typical for Fair-Rite MnZn and NiZn ferrites.	

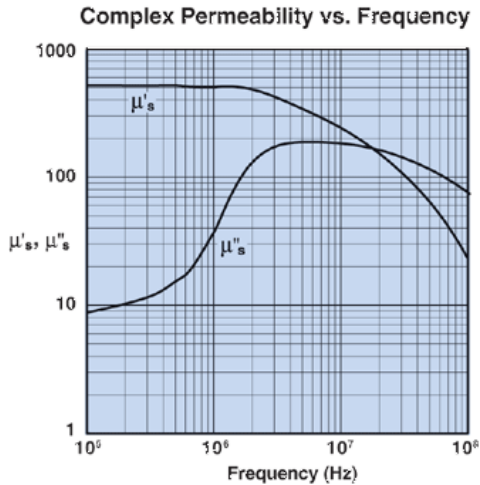
44 Material Specifications:

A NiZn ferrite developed to combine a high suppression performance, from 30 MHz to 500 MHz, with a very high dc resistivity.

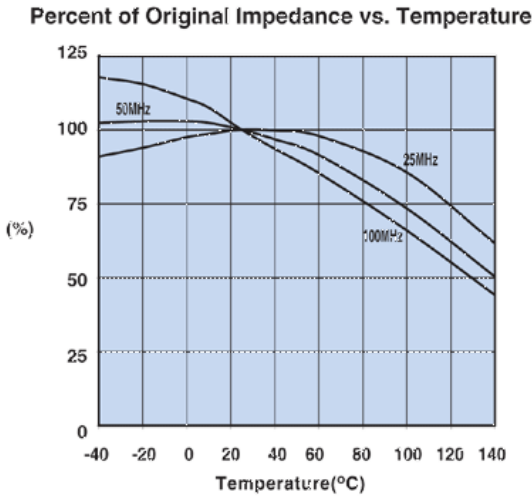
SM beads, PC beads, wound beads, round cable snap-its, and connector EMI suppression plates are all available in 44 material.

Property	Unit	Symbol	Value
Initial Permeability @ B < 10 gauss		μ _i	500
Flux Density @ Field Strength	gauss	B	3000
Residual Flux Density	gauss	B _r	1100
Coercive Force	oersteds	H _c	0.45

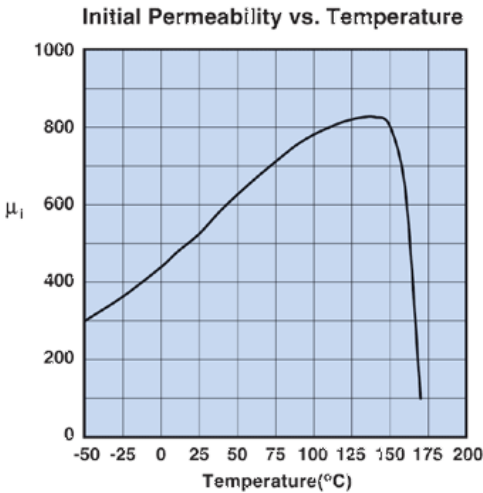
Loss Factor	10^{-5}	$\tan \delta / \mu_i$	125
@ Frequency	MHz		1.0
Temperature Coefficient of Initial Permeability (20 -70°C)	%/°C		0.75
Curie Temperature	°C	T_c	>160
Resistivity	Ω cm	ρ	1×10^{-9}



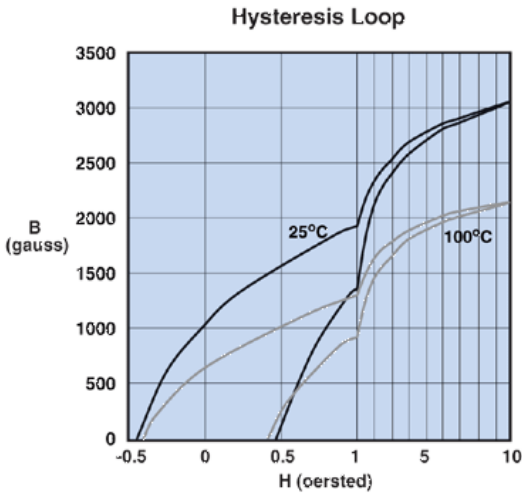
Measured on a 17/10/6mm toroid using the HP 4284A and the HP 4291A.



Measured on a 2644000301 using the HP4291A.

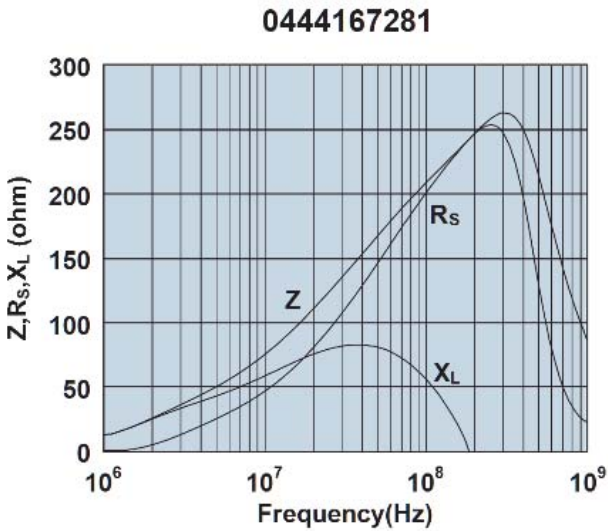


Measured on a 17/10/6mm toroid at 100kHz.



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

Impedance Curve



Impedance, reactance, and resistance vs. frequency.

