

Products

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Catalog Part Search:

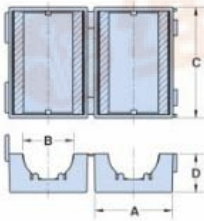


Figure 2

Part Number: 0444173551
Frequency Range: Broadband Frequencies 25-300 MHz (43 & 44 materials)
Description: CSRA29/29/42-44-19 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: 78.00 (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	29.20	—	1.150	—	—	—	—	—	—	—	—	—	—
B	18.80	—	0.740	—	Reel Information					Pkg Size			
C	42.00	—	1.650	—						—			
D	14.70	—	0.579	—	Tape Width mm	Pitch mm	Parts 7" Reel	Parts 13" Reel	Parts 14" Reel	Connector Plate			
E	—	—	—	—						# Holes		# Rows	
F	—	—	—	—	Cable Information								
G	—	—	—	—									
H	—	—	—	—	Max Diameter		Max Dimension		Solid Equivalent		Flat Cable Cores		
J	—	—	—	—	18.500 .728		—		—		—		
K	—	—	—	—									

Electrical Specifications

Typical Impedance (Ω)	
10 MHz	50
25 MHz*	95
100 MHz*	195
250 MHz	322

Electrical Properties	
-	-

Ferrite Material Constants

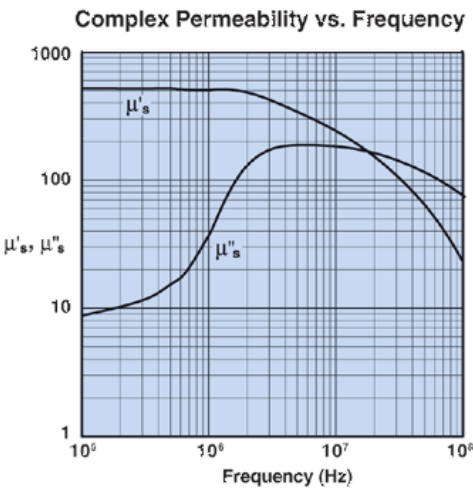
Specific Heat	0.25 cal/g/°C
Thermal Conductivity	10x10 ⁻³ cal/sec/cm ² /°C
Coefficient of Linear Expansion	8 - 10x10 ⁻⁶ /°C
Tensile Strength	4.9 kgf/mm ²
Compressive Strength	42 kgf/mm ²
Young's Modulus	15x10 ³ kgf/mm ²
Hardness (Knoop)	650
Specific Gravity	≈ 4.7 g/cm ³
The above quoted properties are typical for Fair-Rite MnZn and NiZn ferrites.	

44 Material Specifications:

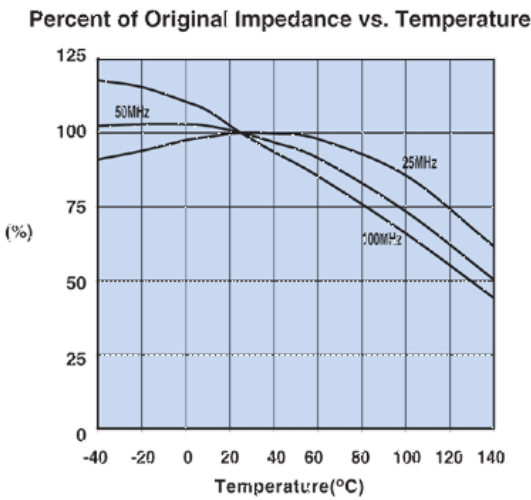
Property	Unit	Symbol	Value
Initial Permeability @ B < 10 gauss		μ _i	500
Flux Density @ Field Strength	gauss	B	3000
Residual Flux Density	gauss	B _r	10
			1100

A NiZn ferrite developed to combine a high suppression performance, from 10 MHz to 500 MHz, with a very high dc resistivity. SM beads, FC beads, wound beads, round cable snap-its, and connector EMI suppression plates are all available in 44 material.

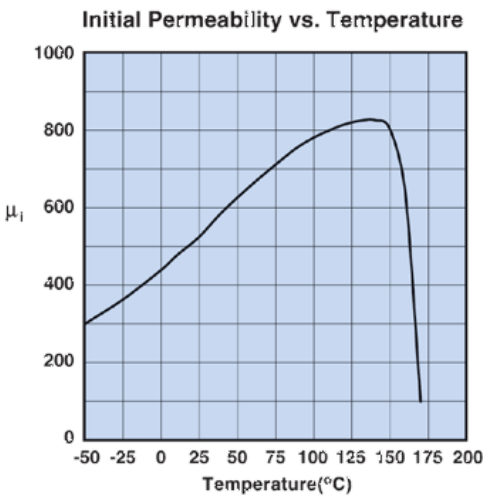
Loss Factor	10^{-6}	$\tan \delta/\mu_i$	125
@ Frequency	MHz		1.0
Temperature Coefficient of Initial Permeability (20 -70°C)	%/°C		0.75
Curie Temperature	°C	T_c	>160
Resistivity	Ω cm	ρ	1×10^{-9}



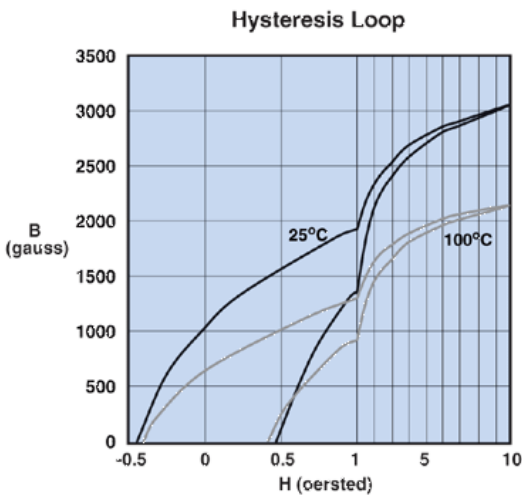
Measured on a 17/10/6mm toroid using the HP 4284A and the HP 4291A.



Measured on a 2644000301 using the HP4291A.

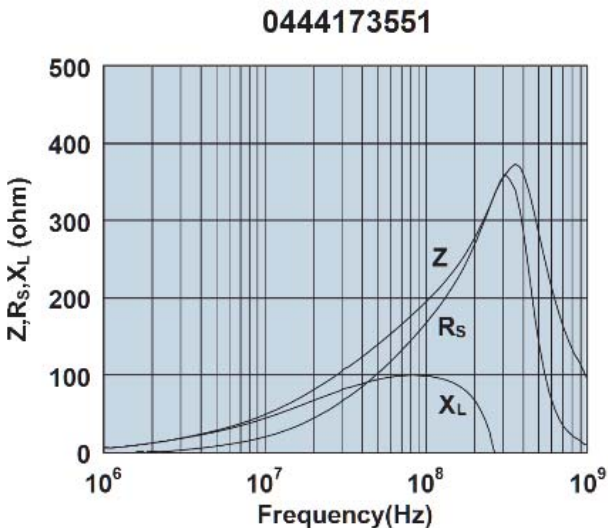


Measured on a 17/10/6mm toroid at 100kHz.



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

Impedance Curve



Impedance, reactance, and resistance vs. frequency.

