

Figure 1

Part Number: 4033276011
Frequency Range: Temperature Stable, 33 (ui=600) material
Description: 33 ROD
Application: Inductive Components
Where Used: Open Magnetic Circuit
Part Type: Rods

Part Type Information

Mechanical Specifications

Weight: 3.90 (g)

[View Chart Legend](#)

A	6.35	±0.25	0.250	—
B	—	—	—	—
C	25.40	±0.75	1.000	—

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
<i>The above quoted properties are typical for Fair-Rite MnZn and NiZn ferrites.</i>	

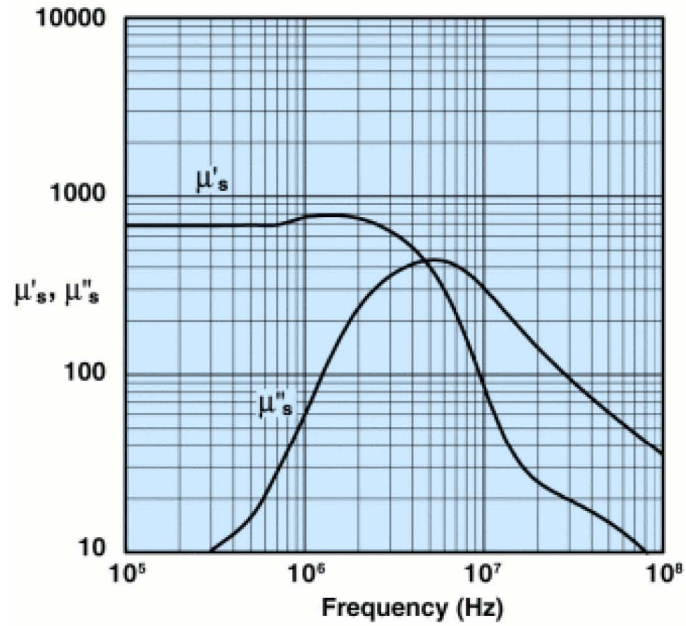
An economical MnZn ferrite designed for use in open circuit applications for frequencies up to 3.0 MHz.

Rods are available in 33 material.

33 Material Specifications:

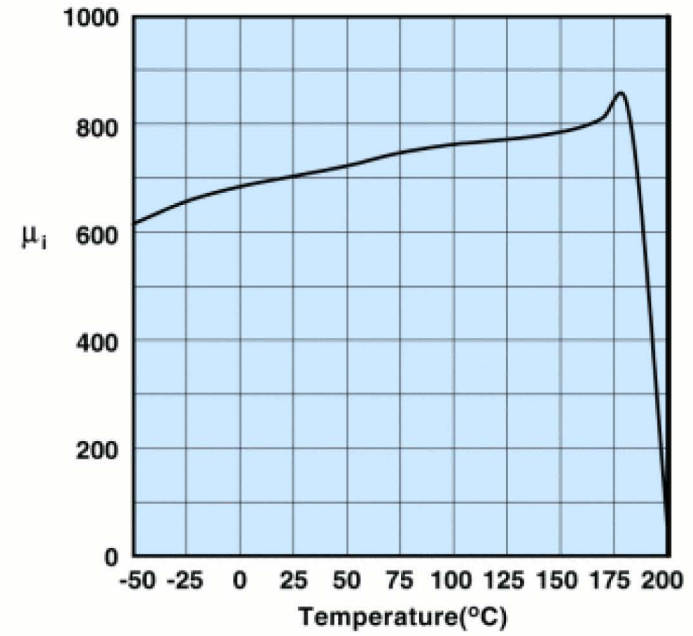
Property	Unit	Symbol	Value
Initial Permeability @ B < 10 gauss		μ _i	600
Flux Density @ Field Strength	gauss oersted	B H	2800 5
Residual Flux Density	gauss	B _r	1200
Coercive Force	oersted	H _c	0.60
Loss Factor @ Frequency	10 ⁻⁶ MHz	tan δ/μ _i	25 0.2
Temperature Coefficient of Initial Permeability (20 -70°C)	%/°C		0.10
Curie Temperature	°C	T _c	>150
Resistivity	Ω cm	ρ	1x10 ²

Complex Permeability vs. Frequency



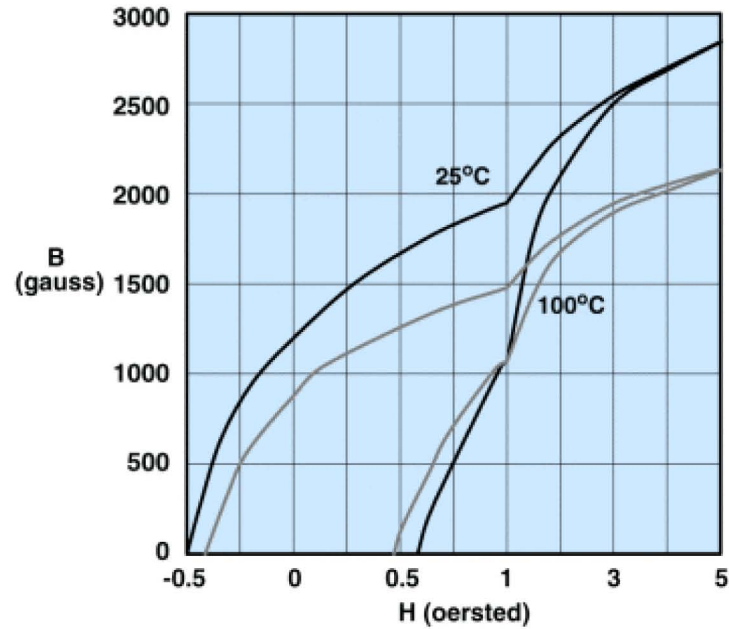
Measured on a 17/10/6mm toroid using the HP 4284A and, the HP 4291A.

Initial Permeability vs. Temperature



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

Hysteresis Loop



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