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S-181-31-2P

Features

NiZn ferrite with range 1 to 500 MHz for suppression of conducted EMI. No limitation of dimensional resonance of common MnZn ferrite properties.

Broadband frequency range of 1-300 MHz. Suppressing frequencies up to 500 MHz. Multi-strand cable common mode filtering and single conductor differential mode filtering.

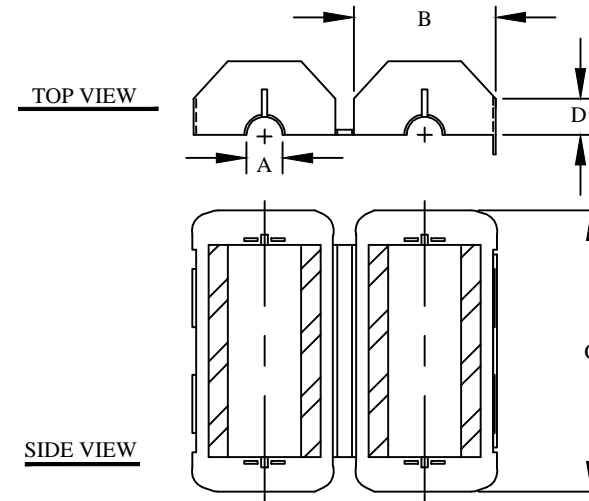
Electrical Specifications

Item	Unit/Symbol	Condition	Value	Tol.
Typical Impedance	Ω	1 MHz	14	Typ.
Typical Impedance	Ω	5 MHz	35	Typ.
Typical Impedance	Ω	10 MHz	44	80 Min.
Typical Impedance	Ω	25 MHz	69	125 Min
Typical Impedance	Ω	100 MHz	115	260 \pm 20%
Typical Impedance	Ω	250 MHz	140	Typ.
Initial Permeability	μ_0	@ B < 10 gauss	1500	Nom.
Temp. Coeff. Of initial Permeability	%, $^{\circ}\text{C}$	20 - 70 $^{\circ}\text{C}$	1.60	Typ.
Coercive Force	H_c	oersted	0.35	Typ.
Residual Flux Density	Gauss, B_r	N/A	2500	Typ.
Flux Density	Gauss, B	Initial (B), oersted	3400	Typ.
	Gauss, H	@ Field Strength (H), oersted	5	Typ.
Curie temperature	$^{\circ}\text{C}$	T_c	> 130	Nom.
Resistivity	$\Omega \text{ cm}, \rho$	@ Field Strength	3×10^3	Typ.
Loss Factor	$10^{-6}, \tan \delta / \mu$	Initial	20	Typ.
	MHz	@ Frequency	0.1	Typ.

Dimensions

	Cable Diameter	A	B (Core Dimension)	C	D	E
In	0.500	0.514	1.220	1.550	0.600	N/A
Tol.	Max.	Nom.	Nom.	Nom.	Nom.	N/A
mm	12.70	13.05	31.00	39.40	15.25	N/A
Tol.	Max.	Nom.	Nom.	Nom.	Nom.	N/A
Weight	61.00 g					

REVISION HISTORY						
REV	ECN	DESCRIPTION	SIGN & DATE			
			BY	DATE	AP.	DATE
A		Production release	EO	9/27/13	JL	9/27/13



For additional detail, specifications and charts see:

http://www.bytemark.com/products/ferrite_matl.htm

CODE IDENT	MFG. P/N	DESCRIPTION	ITEM NO.
		PARTS LIST	
AUTOCAD	X	www.coilws.com www.cwsbytemark.com	CWSBYTEMARK 353 West Grove Ave. Orange, CA. 92865
SOLIDWORKS			
DRAWN	EO 9/27/13	Round RF/EMI Suppression Core Material 31, MnZn	
CHECKED	JL 9/27/13		
ENGR.	JL 9/27/13		
APPR.	JL 9/27/13		
TITLE:		SIZE DWG. NO.	REV
		B S-181-31-2P	A
SCALE		N/A	SHEET 1 OF 1

UNLESS OTHERWISE SPECIFIED
 DIMENSIONING AND TOLERANCE PER ANSI Y14.5M
 ALL DIMENSIONS ARE IN INCHES AND [MILLIMETERS].
 TOLERANCE INCHES:
 .XXX=±.005 .XX=±.015 \angle =±0°30'
 TOLERANCE METRICS:
 .XXX=±.127 .XX=±.38 \angle =±0°30'
 ANGLE PROJECTION \angle
 DO NOT SCALE DRAWING