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F-193A-F

Features

MnZn ferrite material for common mode chokes, power transformers, power inductors, broadband transformers, noise filter and etc.

Electrical Specifications

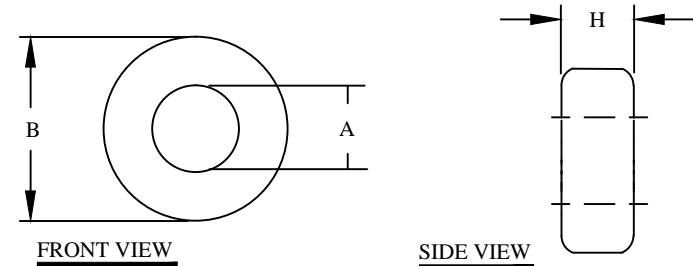
Item	Unit/Symbol	Condition	Value	Tol.
A_L	mH/1000	@ 5 gauss in a de-gaussed state	4460	± 20%
L_e	cm	N/A	12.3	± 10%
A_e	cm ²	N/A	1.46	± 10%
V_e	cm ³	N/A	18	± 10%
Density	g/cm ³	N/A	4.8	Typ.
Permeability	μ_0	Typical	3000	± 20%
Coercivity	Oe, A/m	Typical	0.2, 16	Typ.
Flux Density	Gauss, B	Typical	4900	Typ.
	Gauss, H	@ 1194 A/m, 15 oe mT	490	Typ.
Curie temperature	°C	T_c	> 250	Typ.
Resistivity	Ω cm, ρ	Typical	2	Typ.
Relative Loss Factor	10^{-6}	$\tan\delta / \mu$	< 8	Typ.
	kHz	@ Frequency	100	Typ.
Max. Usable freq.	MHz	50% roll-off	< 1.3	Typ.
Remanence	G, mT	Typical	1200, 120	Typ.
Disaccommodation Factor	10^{-6}	Typical	N/A	Typ.

Power Loss (P_L), Sine Wave, in mW/cm³ (typical)

Condition		@ 25 °C	@ 60 °C	@ 100 °C	@ 120 °C		
I	25 kHz	90	200 mT	160	2000 G	240	N/A
II	100 kHz	100	100 mT	180	1000 G	225	N/A
III	500 kHz	N/A	50 mT	N/A	500 G	N/A	N/A
IV	700 kHz	N/A	50 mT	N/A	500 G	N/A	N/A

REVISION HISTORY

REV	ECN	DESCRIPTION	SIGN & DATE			
			BY	DATE	AP.	DATE
A		Production release	EO	2/13/13	JL	2/13/13



Case Dimensional Tolerances

	in	tol.	mm	tol.
B (Outer Diameter)	1.932	1.962 Max	49.10	49.84 Max
A (Inner Diameter)	1.252	1.222 Min	31.80	31.03 Min
H (Height)	0.750	0.765 Max	19.00	19.44 Max
Weight	91.00 g			

For additional detail, specifications and charts see:

<http://www.bytemark.com/>

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 2/13/13	Ferrite Toroid Core MnZn Material F, uncoated F-193A-F	
CHECKED	JL 2/13/13		
ENGR.	JL 2/13/13		
APPR.	JL 2/13/13		
SIZE DWG. NO.		B	REV 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