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## F-50B-75

### Features

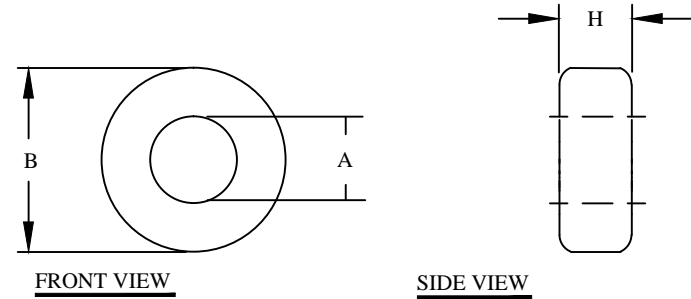
MnZn ferrite material with high permeability for broadband and pulse transformers applications. Also intended for common-mode inductor designs.

Burnished to break sharp edges, can contain Parylene C coat at smaller diameters from the length of 9.5mm (0.375") or a uniform coating of thermo-set plastic at larger dimensions (if part numbers ends with a C).

REVISION HISTORY					
REV	ECN	DESCRIPTION	SIGN & DATE		
			BY	DATE	AP. DATE
A		Production release	EO	1/31/13	JL 1/31/13

Electrical Specifications				
Item	Unit/Symbol	Condition	Value	Tol.
A <sub>L</sub>	nH/N <sup>2</sup>	@ 10 KHz	6000	± 20%
L <sub>c</sub>	cm	N/A	3.12	± 10%
A <sub>e</sub>	cm <sup>2</sup>	N/A	0.299	± 10%
V <sub>e</sub>	cm <sup>3</sup>	N/A	0.93	± 10%
Initial Permeability	μ <sub>0</sub>	@ B < 10 gauss	5000	± 20%
Temp. Coeff. Of initial Permeability	%, °C	20 - 70 °C	0.6	Typ.
Coercive Force	H <sub>c</sub>	oersted	0.16	Typ.
Residual Flux Density	Gauss, B <sub>r</sub>	N/A	1400	Typ.
Flux Density	Gauss, B	Initial (B), oersted	4300	Typ.
	Gauss, H	@ Field Strength (H), oersted	5	Typ.
Curie temperature	°C	T <sub>c</sub>	> 140	Nom.
Resistivity	Ω cm, ρ	@ Field Strength	10 <sup>2</sup>	Typ.
Loss Factor	10 <sup>-6</sup> , tanδ / μ	Initial	15	Typ.
	MHz	@ Frequency	0.1	Typ.

Dimensional Tolerances				
	in	tol.	mm	tol.
Case				
B (Outer Diameter)	0.500	± 0.010	12.70	± 0.25
A (Inner Diameter)	0.312	± 0.008	7.90	± 0.20
H (Height)	0.500	± 0.014	12.70	± 0.35
Weight	4.70 g			



**For additional detail, specifications and charts see:**

[http://www.bytemark.com/products/ferrite\\_matl.htm](http://www.bytemark.com/products/ferrite_matl.htm)

CODE IDENT	MFG. P/N	DESCRIPTION	ITEM NO.
		<b>PARTS LIST</b>	
AUTOCAD	X	www.coilws.com www.cwsbytemark.com	CWSBYTEMARK 353 West Grove Ave. Orange, CA. 92865
SOLIDWORKS			
DRAWN	EO 1/31/13	<b>TITLE:</b> <b>Ferrite Toroid Core Material</b> <b>75, MnZn</b>	
CHECKED	JL 1/31/13		
ENGR.	JL 1/31/13		
APPR.	JL 1/31/13	SIZE DWG. NO.	REV
		<b>B</b>	<b>F-50B-75</b> <b>A</b>
UNLESS OTHERWISE SPECIFIED		SCALE	SHEET 1 OF 1
DIMENSIONING AND TOLERANCE PER ANSI Y14.5M ALL DIMENSIONS ARE IN INCHES AND [MILLIMETERS]. TOLERANCE INCHES: .XXX=±.005 .XX=±.015 <math>\sphericalangle=±0°30'</math> TOLERANCE METRICS: .XXX=±.127 .XX=±.38 <math>\sphericalangle=±0°30'</math> ANGLE PROJECTION		N/A	
DO NOT SCALE DRAWING			