T130-26

Features

Good results of general power conversion and line filter administration. Applicable (at <50kHz) for Power Factor Correction Chokes, DC Chokes and lower Et/N. Also applies for 60 Hz differential-mode EMI Line Chokes, and light dimmer chokes.

Electrical Specifications							
Item	Unit/Symbol	Condition	Value	Tol.			
A_L	nH/N ²	nH/N ² AC flux density of 10 gauss (1 mT) @10 kHz		± 10%			
Le	cm	N/A	8.28	Тур.			
Ae	cm ²	N/A	0.698	Тур.			
Ve	cm ³	N/A	5.780	Тур.			
Density	g/cm ³	N/A	7.0	Тур.			
Permeability μ_0		N/A	75	± 10%			
Permeability with DC BIAS %μ ₀ , μ ₀ effective		HDC = 50 Oerstesd	51, 38.3	Тур.			
Temp. Coef. of Permeability	+ppm/°C	N/A	825	Тур.			
Coef. of Lin. Expansion	+ppm/°C	N/A	12	Тур.			
Thermal Conductivity mW/cm-°C		N/A	42	Тур.			

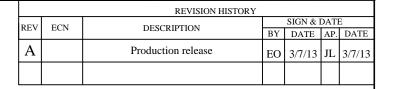
$$Temperature \ Rise: \Delta T(^{\circ}C) = \left[\frac{Total \ Power \ Dissipation \ (milliwatts)}{Surface \ Area \ (cm^{2})}\right]^{0.833}$$

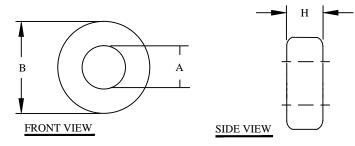
$$Required turns = \left[\frac{desired \ L \ (nH)}{A_L \left(\frac{nH}{N^2} \right)} \right]^{\frac{1}{2}}$$

Peak AC Flux Density:
$$B_{pk} = \frac{E_{avg}10^8}{4ANf}$$

Magnetizing Force:
$$H = \frac{0.4\pi\,N\,I}{\ell}$$

Core Loss in mW/cm³ (extrapolated data from high frequency testing)							
Frequency	60 Hz	1kHz	10kHz	50kHz	100kHz	500kHz	
Condition	@ 5000G	@ 1500G	@ 500G	@ 225G	@ 140G	@ 50G	
Value	32	60	75	89	83	139	





Case Dimensional Tolerances							
	in	tol.	mm	tol.			
B (Outer Diameter)	1.300	0.020	33.00	0.51			
A (Inner Diameter)	0.780	0.020	19.80	0.51			
H (Height)	0.437	0.025	11.10	0.64			
Weight 40.46 g							

For additional detail, specifications and charts see:

http://www.bytemark.com/products/IPCores index.html

ℓ = Mean Magnetic									
A = Cross-sectional area (cm2)			CODE			DESCRIPTION			ITEM NO.
f = frequency (hertz) B _{nk} = Gauss (G)			PARTS LIST						
D _{pk} = Gauss (G)		AUTOCAD		Х			CWSBYTEMARK		
		SOLID	VORKS		www.coilws.com		353 West Grove Ave Orange		
	UNLESS OTHERWISE SPECIFIED	SIGN		DATE	www.cwsb	ww.cwsbytemark.com		92865	
	IOLERANCE PER ANSI Y14.5M	DRAWN	ЕО	3/7/13	TITLE:	Dowder Co	erial Mix 26,		
		CHECKED	JL	3/7/13	Hon		ow/Wh		20,
	TOLERANCE INCHES: .XXX=±.005 .XX=±.015 < √=±0'30' TOLERANCE METRICS:	ENGR.	JL	3/7/13	CIZE IDWO NO	1 611	OW/ WII	110	- DEV
.XXX=±.127 .XX=±.38 <=±0'30' ANGLE PROJECTION ⊕ ←		APPR.	JL	3/7/13	SIZE DWG. NO.	T1.	30-26		A A
	DO NOT SCALE DRAWING				SCALE	N/A		SHEET 1 OI	F 1
						040 511	_		

L = inductancenH = nanohenries

H = oersteds (Oe) N = Number of turns

I = Current (amperes)