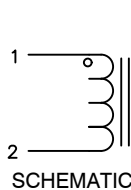
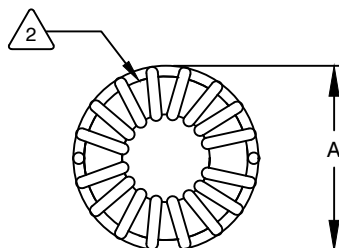


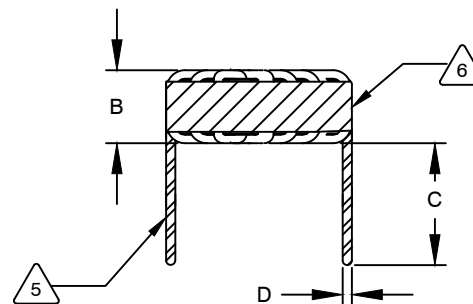
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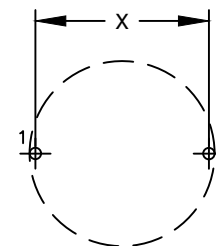
SCHEMATIC



BOTTOM VIEW



FRONT VIEW



MOUNTING HOLES PATTERN

DIMENSIONAL TOLERANCES INCHES [MM]				
A MAX	B MAX	C TYP	D REF	X REF
0.82 [20.83]	0.40 [10.16]	0.50 [12.70]	0.036 [0.91]	0.78 [19.81]

REVISION HISTORY					
REV	ECN	DESCRIPTION	SIGN & DATE		
			BY	DATE	CHK DATE
B	—	UPDATED SPEC.	TDK	6/26/20	JLAU 6/26/20
C	—	UPDATED SPEC.	TN	08/01/2020	JL 08/01/2020

DC BIAS TABLE

DC BIAS (AMP)	L@ 1KHz (REF)
0	53uH
1.0	52uH
2.0	50uH
3.0	48uH
4.0	46uH
4.8	44uH

7 BUILD TO RoHS COMPLIANCE AND LEAD FREE.

USING A PERMANENT MARKING METHOD

MARK PART NUMBER, REVISION AND DATE CODE

WRAP INDUCTOR WITH 3M # 79 OR EQUAL



(I.E. COIL MUST REST FLAT ON PCB). LEADS MUST BE TANGENT TO THE CORE
REMOVE INSULATION AND TIN LEADS 0.5 INCH, FLUSH WITH THE COIL EDGE



WIND COILS EVENLY SPACED AROUND THE CORE

4 CONSTRUCTION:

THESE SPECIFICATIONS ARE BASED ON LOW RIPPLE CURRENT

WEIGHT: 11 GRAMS TYPICAL

INTERWINDING CAPACITANCE = 18.7pF TYP @ SRF

SRF = 5.0MHz TYPICAL

|Z| = 6.95 KILO-OHMS TYP @ SRF

RECOMMENDED AMBIENT OPERATING TEMP: -40°C TO 155°C

HI-POT TEST FOR WINDING TO CORE ISOLATION = 500VDC MIN.

INDUCTOR CURRENT RATING : 4.8 AMPS, 40°C TEMP. RISE WITH SOME AIR FLOW

DCR = 30.0 MILLI-OHMS MAX.

INDUCTOR DC BIAS: SEE TABLE ON THE RIGHT

INDUCTANCE = 50uH ± 10% @ 0 AMP DC BIAS, 1.0 KHz, 250mV

3 SPECIFICATIONS: @ 25°C:

WIRE: UL RECOGNIZED 200°C RATED MAGNET WIRE

CORE: POWDERED TOROIDAL CORE, CWS BYTEMARK OR OTHER APPROVED PART



1 MATERIAL: UL RECOGNIZED 94V-0 FOR FLAMMABILITY, RATING CLASS B (130°C MIN.) REQUIRED
ANY TOLERANCE. THIS DIM. CAN VARY A LITTLE FROM PART TO PART.

"TYP" IN DIM. TOL. TABLE REFERS TO A NON-CRITICAL TYPICAL (AVERAGE) DIM. WITHOUT

NOTES: UNLESS OTHERWISE STATED, READ NOTES FROM BOTTOM UP.

CAGE CODE: 5DME2

UNLESS OTHERWISE SPECIFIED	
DIMENSIONING AND TOLERANCE PER ANSI Y14.5M	
ALL DIMENSIONS ARE IN INCHES AND [MILLIMETERS].	
TOLERANCE INCHES: .XXX=±.005 .XX=±.015 <1/16=±0.030	
TOLERANCE METRICS: .XXX=±.127 .XX=±.38 <1/16=±0.30	
ANGLE PROJECTION	
DO NOT SCALE DRAWING	

CODE IDENT	MFG. P/N	DESCRIPTION	ITEM NO.
PARTS LIST			
AUTOCAD	X	COILWS COM, INC www.coilws.com	CWS Coil Winding Specialist. 353 W. Grove Ave. Orange, CA. 92865
SOLIDWORKS			
SIGN	DATE		
DRAWN	TDK 2/8/04		
CHECKED	JLAU 2/9/04	TITLE: TOROIDAL POWER INDUCTOR 50uH, 4.8 Amps, Horizontal	SIZE DWG. NO. B HF166-500M-4.8AH
ENGR.	KSUM 3/5/04		
APPR.	JLAU 3/6/04		
SCALE		2=1	REV C
SHEET 1 OF 1			