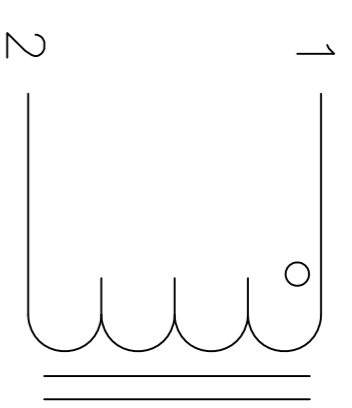


REVISION HISTORY

REV	ECN	DESCRIPTION	SIGN & DATE			
			BY	DATE	CHK	DATE
A		PRODUCTION RELEASE	RCL	6/22/11	JCL	3/21/11
B		ELECTRICAL SPEC. CHANGE	AK	9/26/12	JLAU	9/26/12
B1		UPDATE SPEC.	TN	9/29/17	JLAU	9/29/17
C		REVISED MECH. & ELEC. SPEC.	TN	08/20/19	JL	08/20/19



SCHEMATIC



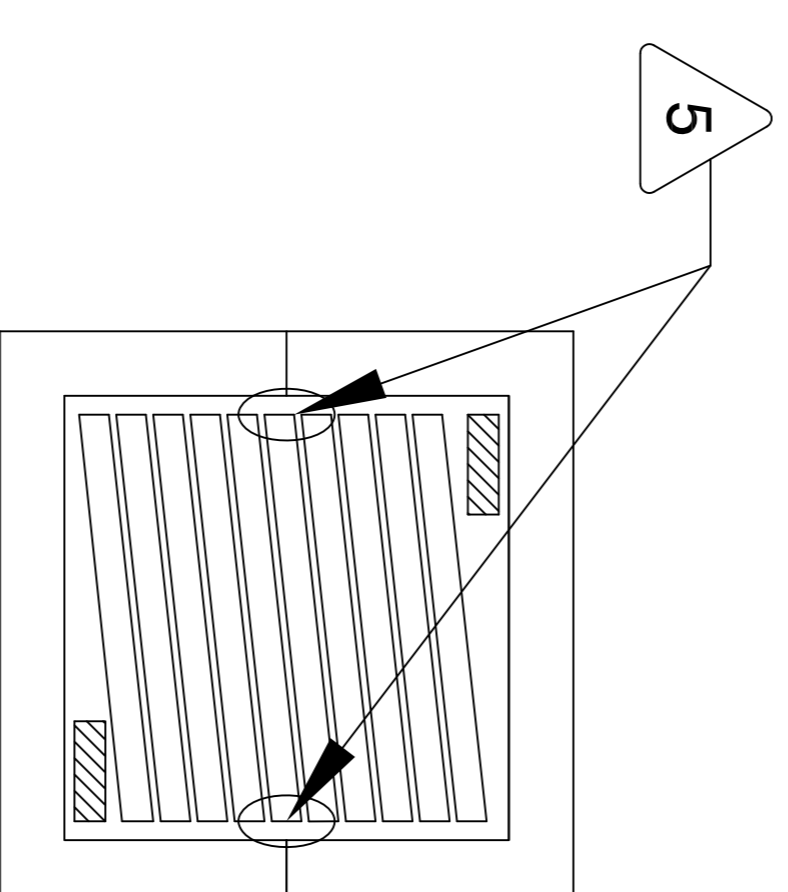
FRONT VIEW

**DIMENSIONAL TOLERANCE**

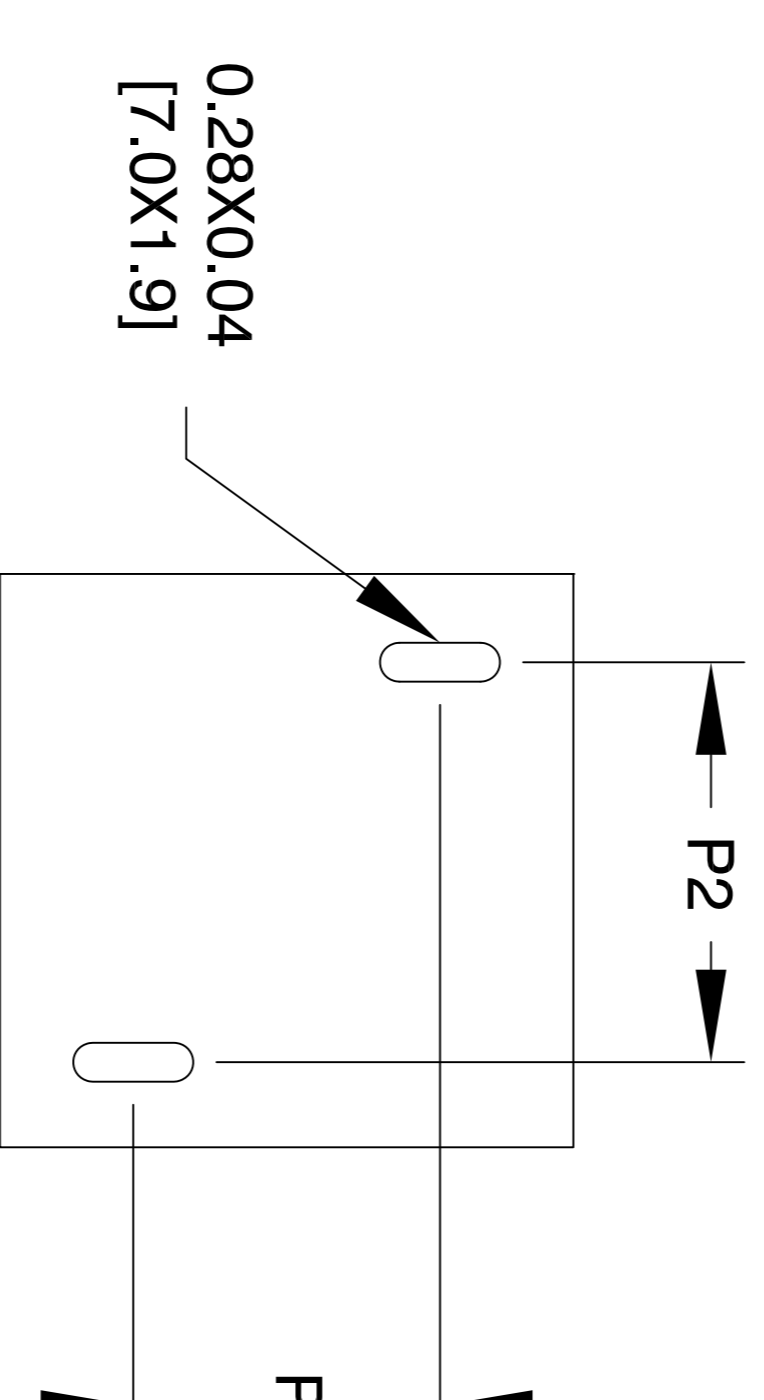
	mm	inch
C1	13.00 ± 1.00	0.51 ± 0.04
C2	12.00 ± 1.00	0.47 ± 0.04
D1	6.0 (TYP)	0.23 (TYP)
D2	0.9 (TYP)	0.04 (TYP)
L	58.0 MAX	2.29 MAX
W	58.0 MAX	2.29 MAX
H	33.0 MAX	1.30 MAX
P1	26.0 ± 1.00	1.02 ± 0.04
P2	36.1 ± 1.00	1.42 ± 0.04

SIDE VIEW

- 5 VANISH PART AND CURE  
APPLY SILICON WHERE SHOWN  
WRAP TAPE AROUND CORES  
WITH CORES AND NOMEX SPACERS  
ASSEMBLE PRE FORMED FLAT HELICAL COIL  
CONSTRUCTION
- 4 WEIGHT: 480.0 GRAM (TYP)  
MAX INDUCTOR TEMP RATING: 200°C  
RECOMMENDED AMBIENT OPERATING TEMP: -40°C TO 85°C  
HI-POT TEST FOR WINDING TO CORE ISOLATION. 1000VDC @ 2mA, 1 MIN  
INTERWINDING CAPACITANCE @ 10KHZ = 17.38 pF (TYP)  
|z|@SRF=5.5 KILO-OHM (TYP)  
SRF=2.5 MHz (TYP)  
RATED CURRENT: 50 AMPS  
DCR= 12.0 MILLI-OHM MAX.  
L@DC BIAS: SEE TABLE ON RIGHT.  
L = 220uH NOM. ±15%, MEASURED AT 10 KHZ, 0.25V, ZERO DC BIAS  
SPECIFICATIONS:
- 3 VANISH DOLPH or EQUAL  
SILICON DOW CORNING OR EQUAL  
NOMEX SPACERS FOR SIDE AND CENTER LEG OF CORES  
OUTER WRAP: 3M GLASS OR EQUAL  
WIRE: UL RECOGNIZED 200°C RATED MAGNET WIRE  
CORE: COMPACTED POWDERED CORE



BOTTOM VIEW



MOUNTING HOLES PATTERN

DC-BIAS	L
0A	221.5uH
5A	222.9uH
10A	218.9uH
15A	211.1uH
20A	201.2uH
25A	182.0uH
30A	171.0uH
35A	157.0uH
40A	139.0uH
45A	126.0uH
50A	112.0uH

- 1 INSULATION CLASS 200°C REQUIRED  
MATERIAL: UL RECOGNIZED 94V-0 FOR FLAMMABILITY

NOTES: UNLESS OTHERWISE SPECIFIED. READ FROM BOTTOM UP.

CAGE CODE: 5DME2

QTY	CODE IDENT	MFG. P/N	DESCRIPTION	ITEM NO.
<b>PARTS LIST</b>				
AUTOCAD	SIGN	DATE	TITLE: High Current Helical Inductor	
SOLIDWORKS	RL	2/11/11	220 uH, 50 Amps, Horizontal	
CHECKED	JLAU	2/11/11	www.coilws.com	
ENGR.	JLAU	2/11/11	sales@coilws.com	
APPR.	JLAU	2/11/11	Coil Winding Specialist, Inc.	
			353 W GROVE AVE	
			ORANGE, CA 92865	
			SCALE: NOT TO SCALE	
			SHEET 1 OF 1	

UNLESS OTHERWISE SPECIFIED  
DIMENSIONING AND TOLERANCE PER ANSI Y14.5M  
ALL DIMENSIONS ARE IN INCHES AND [MILLIMETERS].  
TOLERANCE INCHES:  
.XXX=±.010 .XX=±.020  
TOLERANCE METRICS:  
.XXX=±.254 .XX=±.51  
ANGLE PROJECTION  
DO NOT SCALE DRAWING