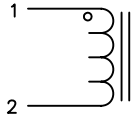
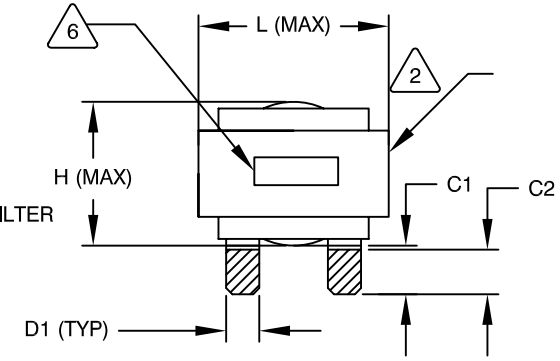
The information contained in this drawing is the sole property of Coil Winding Specialist,Inc.
Any reproduction in part or whole without written permission of Coil Winding Specialist, Inc. is prohibited.

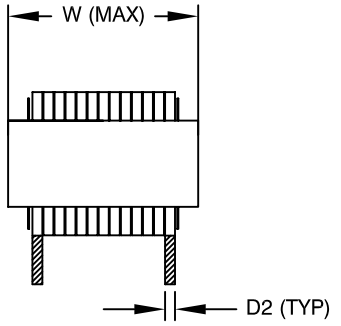
REVISION HISTORY						
REV	ECN	DESCRIPTION	SIGN & DATE			
			BY	DATE	CHK	DATE
A		PRODUCTION RELEASE	RCL	6/22/11	JCL	3/21/11
B		ELECTRICAL SPEC. CHANGE	AK	9/26/12	JLAU	9/26/12



SCHEMATIC



FRONT VIEW



SIDE VIEW

DIMENSIONAL TOLERENCE

	mm	inch
C1	12.20±1.50	0.48 ± 0.06
C2	11.10±1.00	0.44 ± 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	34.0 MAX	1.34 MAX

8 APPLICATION: OUTPUT CHOKE, HIGH DC-BIAS INDUCTOR, INPUT FILTER

7 BUILT TO RoHS COMPLIANCE AND LEAD FREE.

6 MARK PART NUMBER AND REVISION WHERE SHOWN

5 VANISH PART AND CURE
APPLY SILICON WHERE SHOWN

WRAP TAPE AROUND CORES
WITH CORES AND NOMEX SPACERS
ASSEMBLE PRE FORMED FLAT HELICAL COIL

4 CONSTRUCTION
WEIGHT: 480.0 GRAM (Typ)
RECOMMENDED OPERATING TEMP: -40°C TO 85°C AT 55 °C AMBIENT
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
SRF=2.5 MHz
RATED CURRENT: 50 AMPS
DCR= 10.0 MILLI-OHM MAX., USING GW INSTEK GOM-801H OR EQUAL
L@DC BIAS: SEE TABLE ON RIGHT.
L= 220uH NOM. ±15% , MEASURED AT 10 KHz, 0.25V, ZERO DC BIAS

3 SPECIFICATIONS:

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

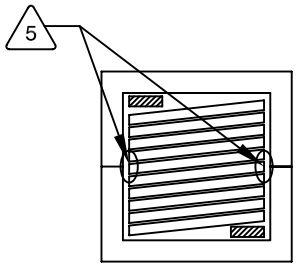
2 CORE: COMPACTED POWDERED CORE

INSULATION CLASS 200°C REQUIRED

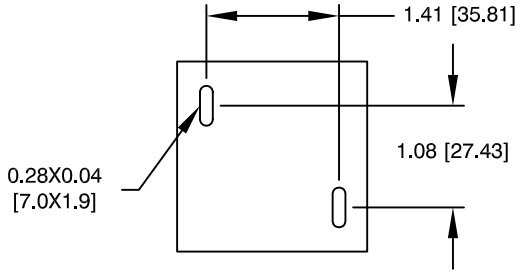
1 MATERIAL: UL RECOGNIZED 94V-0 FOR FLAMMABILITY

NOTES: UNLESS OTHERWISE SPECIFIED.READ FROM BOTTOM UP.

CAGE CODE: 5DME2



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

QTY	CODE IDENT	MFG. P/N	DESCRIPTION	ITEM NO.

PARTS LIST

UNLESS OTHERWISE SPECIFIED
DIMENSIONING AND TOLERANCE PER ANSI Y14.5M
ALL DIMENSIONS ARE IN INCHES AND [MILIMETERS].
TOLERANCE INCHES: .XXX=±.010 .XX=±.020 ∠=±0°30'
TOLERANCE METRICS: .XXX=±.254 .XX=±.51 ∠=±0°30'
ANGLE PROJECTION
DO NOT SCALE DRAWING

	X
AUTOCAD	
SOLIDWORKS	

SIGN		DATE
DRAWN	RL	2/11/11
CHECKED	JLAU	2/11/11
ENGR.	JLAU	2/11/11
APPR.	JLAU	2/11/11

www.coilws.com
sales@coilws.com
Coil Winding Specialist, Inc.
353 W GROVE AVE
ORANGE, CA 92865

TITLE: High Current Helical Inductor
220 uH, 50 Amps, Horizontal

SIZE B | DWG. NO. EK55246-221M-50AH | REV B

SCALE NOT_TO_SCALE | SHEET 1 OF 1

CAD-FILE: