

SCHEMATIC

- 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 VARNISH PART AND CURE
APPLY SILICON WHERE SHOWN
WRAP TAPE AROUND CORES
WITH CORES AND NOMEX SPACERS
ASSEMBLE PRE FORMED FLAT HELICAL COIL
- 4 CONSTRUCTION:

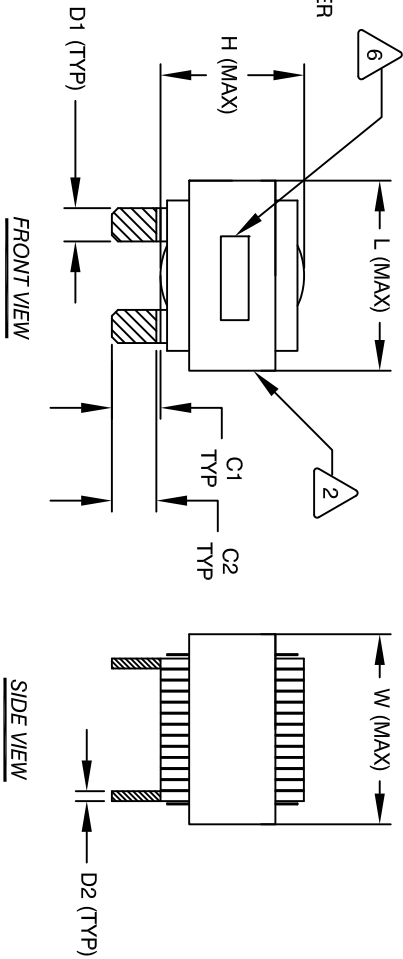
WEIGHT: 503.3 GRAM (TYP)
MAX INDUCTOR TEMP RATING: 200°C
RECOMMENDED AMBIENT OPERATING TEMP: -40°C TO 85°C
HI-POT TEST FOR WINDING TO CORE ISOLATION. 1000VDC @ 2mA, 1 MIN
INTERWINDING CAPACITANCE @ 10KHZ = 19.06pF (TYP)
|Z|@SRF=4.4 KILO-OHM (TYP)
SRF=4.0 MHZ (TYP)
RATED CURRENT: 85 AMPS
DCR= 3.0 MILLIOHM MAX.
L@DC BIAS: SEE TABLE ON RIGHT.
L = 80 uH ± 15%, MEASURED AT 10 KHZ, 0.25V, ZERO DC BIAS
SPECIFICATIONS:

- VARNISH 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

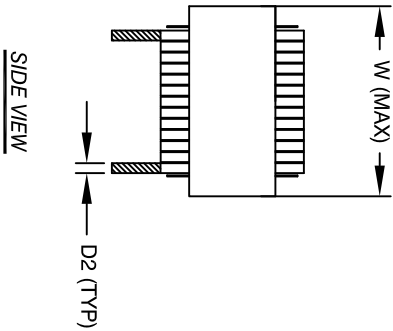
- INSULATION CLASS 200°C REQUIRED
MATERIAL: UL RECOGNIZED 94V-0 FOR FLAMMABILITY

THIS DIM. CAN VARY A LITTLE FROM PART TO PART.
"TYP" IN DIM. REFERS TO A NON-CRITICAL TYPICAL (AVERAGE) DIM. WITHOUT ANY TOLERANCE.

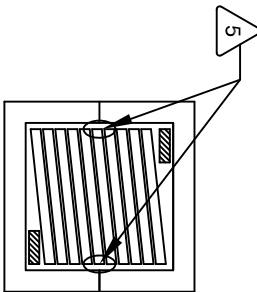
NOTES: UNLESS OTHERWISE SPECIFIED, READ FROM BOTTOM UP.
CAGE CODE: 5DME2



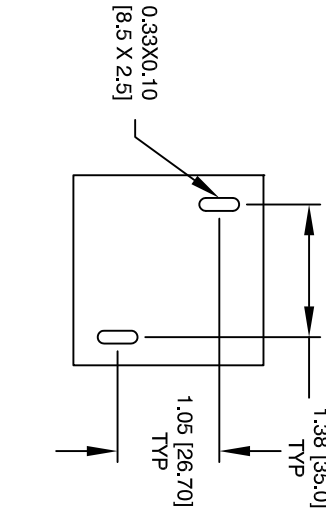
FRONT VIEW



SIDE VIEW



BOTTOM VIEW



MOUNTING HOLES PATTERN

REVISION HISTORY			
REV	ECN	DESCRIPTION	SIGN & DATE
A1		UPDATE SPEC.	BR DATE CHK DATE
A2		DIMENSION UPDATE	TN 10/02/17 JL 10/02/17
B		MOUNTING HOLE PATTERN UPDATE	TN 04/20/21 JL 04/20/21
			TN 12/09/21 JL 12/09/21

DIMENSIONAL TOLERANCE

	mm	inch
C1	13.37 ± 1.50	0.53 ± 0.06
C2	12.31 ± 1.00	0.48 ± 0.04
D1	7.50 (TYP)	0.30 (TYP)
D2	1.50 (TYP)	0.06 (TYP)
L	58.0 MAX	2.29 MAX
W	58.0 MAX	2.29 MAX
H	36.0 MAX	1.41 MAX

DC-BIAS	L
0A	86.3uH
5A	86.4uH
10A	85.5uH
15A	84.0uH
20A	82.1uH
25A	79.6uH
30A	74uH
40A	71uH
50A	63uH
60A	59uH
70A	49uH
85A	43uH

PARTS LIST

QTY	CODE	IDENT	MFG. P/N	DESCRIPTION	ITEM NO.
	AUTOCAD		X		
	SOLIDWORKS				
	SIGN	DATE		www.coilws.com sales@coilws.com	
	DRAWN	RL	2/11/11	Coil Winding Specialist, Inc.	
	CHKD	JLJU	2/11/11	353 W GROVE AVE ORANGE, CA 92665	
	ENGR	JLJU	2/11/11		
	APPR	JLJU	2/11/11		

TITLE: High Current Helical Inductor
80 uH, 85 Amps, Horizontal

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			
SIZE	DWG. NO.	SCALE	NOT_TO_SCALE
B	EK55246-800M-85AH	B	