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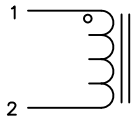
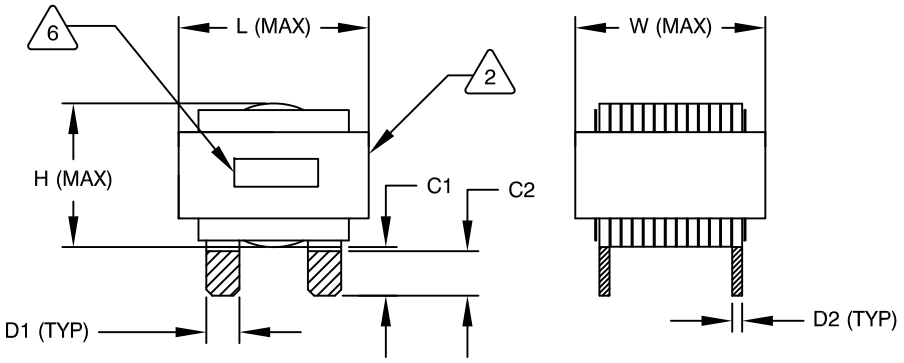
REVISION HISTORY						
REV	ECN	DESCRIPTION	SIGN & DATE			
			BY	DATE	CHK	DATE
A		PRODUCTION RELEASE	RJL	2/13/11	JCL	2/13/11
B		ELECT. AND MECHAN. UPDATE	AK	5/16/12	JL	5/16/12
B1		MECHANICAL UPDATE	AK	6/12/12	JL	6/12/12



SCHEMATIC



FRONT VIEW

SIDE VIEW

DIMENSIONAL TOLERENCE

	mm	inch
C1	15.25±1.50	0.60 ±0.06
C2	12.25±1.00	0.48 ±0.04
D1	7.60 (TYP)	0.29 (TYP)
D2	2.50 (TYP)	0.10 (TYP)
L	57.0 MAX	2.25 MAX
W	57.0 MAX	2.25 MAX
H	36.0 MAX	1.42 MAX

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: 452 GRAM (TYP)
MAX INDUCTOR TEMP RATING: 200°C
RECOMMENDED OPERATING TEMP: -40°C TO 85°C
HI-POT TEST FOR WINDING TO CORE ISOLATION. 1000VDC @ 2mA, 1 MIN
INTERWINDING CAPACITANCE @ 10KHZ = 19pF (TYP)
|z|@SRF=3.8 KILO-OHM (TYP)
SRF=6.9 MHz (TYP)
RATED CURRENT: 180 AMPS
DCR= 1.0 MILLI-OHM MAX.
L@DC BIAS: SEE TABLE ON RIGHT.
L= 30uH ± 15%., MEASURED AT 10 KHz, 0.25V, ZERO DC BIAS

3 SPECIFICATIONS:

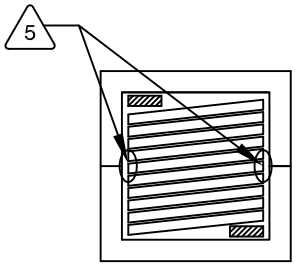
VANISH DOLPH or EQUAL
SILICON DOW CORNING OR EQUAL
NOMEX SPACERS FOR SIDE AND CENTER LEG OF CORES
OUTER WRAP: 3M GLASS OR EQUAL
WIRE: UL RECOGNIZED 200°C RATED MAGNET WIRE

2 CORE: COMPACTED POWDERED CORE

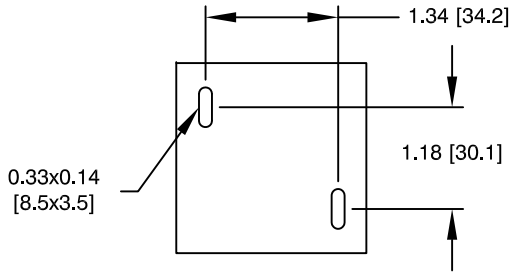
INSULATION CLASS 200°C REQUIRED

1 MATERIAL: UL RECOGNIZED 94V-0 FOR FLAMMABILITY

NOTES: UNLESS OTHERWISE SPECIFIED.READ FROM BOTTOM UP.



BOTTOM VIEW



MOUNTING HOLES PATTERN

DC-BIAS	L
0A	28.1 uH
5A	26.9 uH
10A	26.3 uH
15A	25.4 uH
20A	24.4 uH
25A	23.3 uH
30A	23.3 uH
40A	21.9 uH
50A	20.6 uH
60A	18.7 uH
70A	18.3 uH
80A	16.1 uH
90A	15.0 uH
100A	13.4 uH

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

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ORANGE, CA 92865

TITLE: High Current Helical Inductor
30 uH, 180 Amps, Horizontal

SIZE B | DWG. NO. ES55246-300M-180AH | REV B1

SCALE NOT_TO_SCALE | SHEET 1 OF 1

CAD-FILE: