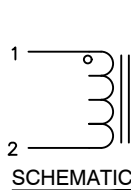
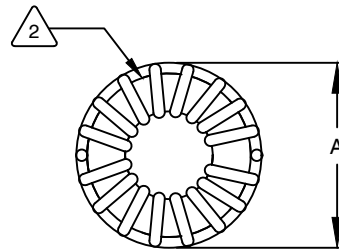


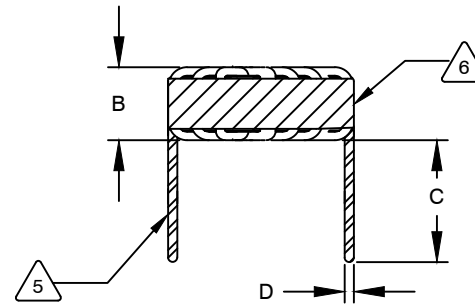
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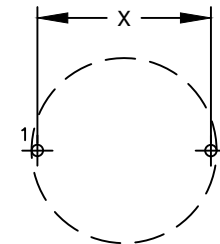
**SCHEMATIC**



**BOTTOM VIEW**



**FRONT VIEW**



**MOUNTING HOLES PATTERN**

| DIMENSIONAL TOLERANCES<br>INCHES [MM] |                |                 |                 |                 |
|---------------------------------------|----------------|-----------------|-----------------|-----------------|
| A<br>MAX                              | B<br>MAX       | C<br>REF        | D<br>REF        | X<br>REF        |
| 0.74<br>[18.80]                       | 0.38<br>[9.65] | 0.50<br>[12.70] | 0.057<br>[1.45] | 0.71<br>[18.03] |

| REVISION HISTORY |     |                              |             |            |      |
|------------------|-----|------------------------------|-------------|------------|------|
| REV              | ECN | DESCRIPTION                  | SIGN & DATE |            |      |
|                  |     |                              | BY          | DATE       | CHK  |
| B                | —   | ELEC. AND MECH. SPECS CHANGE | AK          | 11/01/12   | JLAU |
| C                | —   | UPDATED SPEC.                | TN          | 08/01/2020 | JL   |

**DC BIAS TABLE**

| DC<br>BIAS<br>(AMP) | L@ 1KHz<br>(REF) |
|---------------------|------------------|
| 0                   | 1.5uH            |
| 5                   | 1.4uH            |
| 10                  | 1.4uH            |
| 16                  | 1.3uH            |
| 18                  | 1.1uH            |

7 BUILD TO RoHS COMPLIANCE AND LEAD FREE.

USING A PERMANENT MARKING METHOD

MARK PART NUMBER, REVISION AND DATE CODE

6 WRAP INDUCTOR WITH 3M # 79 OR EQUAL

5 (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

4 WIND COILS EVENLY SPACED AROUND THE CORE  
CONSTRUCTION:

THESE SPECIFICATIONS ARE BASED ON LOW RIPPLE CURRENT

WEIGHT: 5 GRAMS TYPICAL

INTERWINDING CAPACITANCE = 8.9pF TYP @ SRF

SRF = 46.8 MHz TYPICAL

|Z| = 588 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 : 18 AMPS, 40°C TEMP. RISE WITH SOME AIR FLOW

DCR = 2.0 MILLI-OHMS MAX.

INDUCTOR DC BIAS: SEE TABLE ON THE RIGHT

INDUCTANCE = 1.3uH±15% @ 0 AMP DC BIAS, 1.0 KHz, 250mV

3 SPECIFICATIONS: @ 25°C:

2 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:<br>.XXX=±.005 .XX=±.015 <X=±0°30' |  |
| TOLERANCE METRICS:<br>.XXX=±.127 .XX=±.38 <X=±0°30' |  |
| ANGLE PROJECTION                                    |  |
| DO NOT SCALE DRAWING                                |  |

| CODE IDENT |  | MFG. P/N  | DESCRIPTION       |                                                                        | ITEM NO.     |     |
|------------|--|-----------|-------------------|------------------------------------------------------------------------|--------------|-----|
| PARTS LIST |  |           |                   |                                                                        |              |     |
| AUTOCAD    |  | X         |                   | <b>COILWS COM, INC</b><br>www.coilws.com                               |              |     |
| SOLIDWORKS |  |           |                   |                                                                        |              |     |
| SIGN       |  | DATE      |                   | CWS Coil Winding Specialist.<br>353 W. Grove Ave.<br>Orange, CA. 92865 |              |     |
| DRAWN      |  | KCL       | 11/01/12          | TITLE: TOROIDAL POWER INDUCTOR<br>1.3uH, 18.0Amps, Horizontal          |              |     |
| CHECKED    |  | AM        | 11/01/12          |                                                                        |              |     |
| ENGR.      |  | KCL       | 11/01/12          |                                                                        |              |     |
| APPR.      |  | KCL       | 11/01/12          | SIZE                                                                   | DWG. NO.     | REV |
|            |  | B         | HF127-015M-18.0AH |                                                                        |              | C   |
|            |  | SCALE 2=1 |                   |                                                                        | SHEET 1 OF 1 |     |