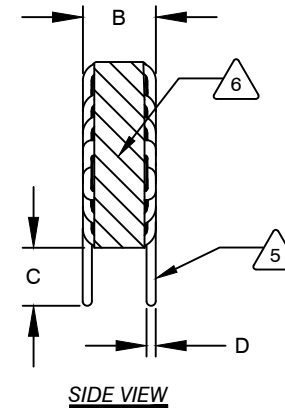
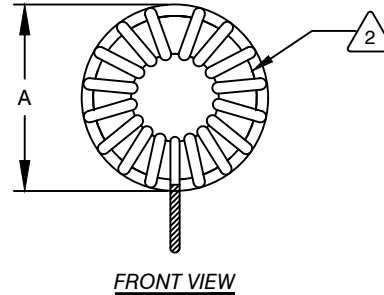
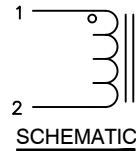


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| DIMENSIONAL TOLERANCES<br>INCHES [MM] |                 |                 |                 |                |
|---------------------------------------|-----------------|-----------------|-----------------|----------------|
| A<br>MAX                              | B<br>MAX        | C<br>MIN        | D<br>REF        | X<br>REF       |
| 0.82<br>[20.83]                       | 0.40<br>[10.16] | 0.50<br>[12.70] | 0.032<br>[0.81] | 0.32<br>[8.13] |

| REVISION HISTORY |     |                    |             |            |      |
|------------------|-----|--------------------|-------------|------------|------|
| REV              | ECN | DESCRIPTION        | SIGN & DATE |            |      |
|                  |     |                    | BY          | DATE       | CHK  |
| A                | —   | PRODUCTION RELEASE | TDK         | 2/09/04    | JLAU |
| B                | —   | UPDATED SPEC.      | TN          | 08/01/2020 | JL   |



DC BIAS TABLE

| DC<br>BIAS<br>(AMP) | L@ 1KHz<br>(REF) |
|---------------------|------------------|
| 0                   | 73uH             |
| 1.0                 | 72uH             |
| 2.0                 | 70uH             |
| 3.0                 | 69uH             |
| 4.0                 | 66uH             |

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

WIND COILS EVENLY SPACED AROUND THE CORE  
CONSTRUCTION:

THESE SPECIFICATIONS ARE BASED ON LOW RIPPLE CURRENT  
WEIGHT: 11 GRAMS TYPICAL

INTERWINDING CAPACITANCE = 19.2pF TYP @ SRF

SRF = 4.2MHz TYPICAL

|Z| = 9.83 KILO-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 : 4.0 AMPS, 40°C TEMP. RISE WITH SOME AIR FLOW

DCR = 45.0 MILLI-OHMS MAX.

INDUCTOR DC BIAS: SEE TABLE ON THE RIGHT

INDUCTANCE = 75uH±10% @ 0 AMP DC BIAS, 1.0 KHz, 250mV

3 SPECIFICATIONS: @ 25°C:

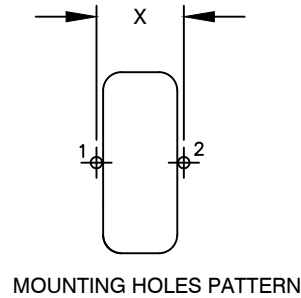
WIRE: UL RECOGNIZED 200°C RATED MAGNET WIRE

2 CORE: POWDERED TOROIDAL CORE, CWS BYTE MARK 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



MOUNTING HOLES PATTERN

| UNLESS OTHERWISE SPECIFIED                             |  |
|--------------------------------------------------------|--|
| DIMENSIONING AND TOLERANCE PER ANSI Y14.5M             |  |
| ALL DIMENSIONS ARE IN INCHES AND [MILLIMETERS].        |  |
| TOLERANCE INCHES:<br>.XXX=±.005 .XX=±.015 <1/16=±0.030 |  |
| TOLERANCE METRICS:<br>.XXX=±.127 .XX=±.38 <1/16=±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<br>CWS Coil Winding Specialist.<br>353 W. Grove Ave.<br>Orange, CA 92865 |  |                                                     |  |              |  |
| SOLIDWORKS |  |          |  |                                                                                                                   |  |                                                     |  |              |  |
| SIGN       |  | DATE     |  |                                                                                                                   |  |                                                     |  |              |  |
| DRAWN      |  | TDK      |  | TITLE:                                                                                                            |  | TOROIDAL POWER INDUCTOR<br>75uH, 4.0 Amps, Vertical |  |              |  |
| CHECKED    |  | JLAU     |  | 2/8/04                                                                                                            |  |                                                     |  |              |  |
| ENGR.      |  | KSUM     |  | 2/9/04                                                                                                            |  |                                                     |  |              |  |
| APPR.      |  | JLAU     |  | 3/5/04                                                                                                            |  |                                                     |  |              |  |
|            |  |          |  | SIZE                                                                                                              |  | DWG. NO.                                            |  | REV          |  |
|            |  |          |  | B                                                                                                                 |  | HF166-750M-4.0AV                                    |  | B            |  |
|            |  |          |  | SCALE                                                                                                             |  | 2=1                                                 |  | SHEET 1 OF 1 |  |