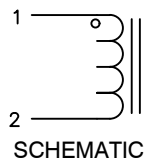


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**SCHEMATIC**

7 BUILD TO RoHS COMPLIANCE AND LEAD FREE.

USING A PERMANENT MARKING METHOD  
MARK PART NUMBER, REVISION AND DATE CODE  
WRAP INDUCTOR WITH 3M # 79 OR EQUAL

(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: 50 GRAMS TYPICAL  
INTERWINDING CAPACITANCE = 27.6pF TYP @ SRF  
SRF = 2.55MHz TYP  
|Z| = 13KILO-OHMS TYP @ SRF  
RECOMMENDED AMBIENT OPERATING TEMP: -40°C TO 155°C  
HI-POT TEST FOR WINDING TO CORE ISOLATION = 500VDC MIN.  
CURRENT RATING : 4.5 AMPS, 40°C TEMP. RISE WITH SOME AIR FLOW  
DCR = 52.0 MILLI-OHMS MAX.  
INDUCTOR DC BIAS: SEE TABLE ON THE RIGHT  
INDUCTANCE = 150uH ± 10% @ 0 AMP DC BIAS, 1.0 KHz, 250mV

3 SPECIFICATIONS: @ 25°C:

WIRE: UL RECOGNIZED 200°C RATED MAGNET WIRE  
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.

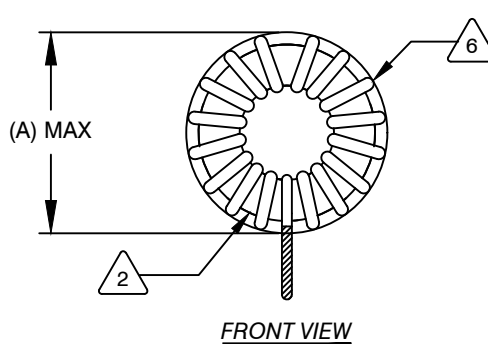
CAGE CODE: 5DME2

**DIMENSIONAL TOLERANCES  
INCHES [MM]**

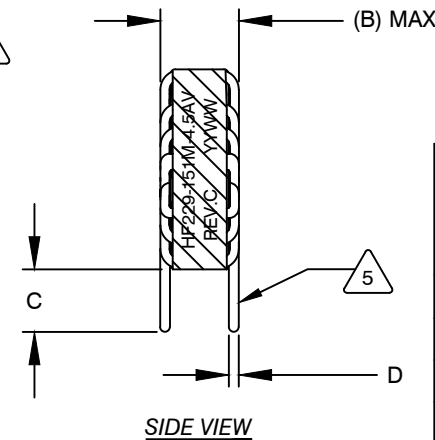
| A<br>MAX        | B<br>MAX        | C<br>TYP        | D<br>TYP        | X<br>REF       |
|-----------------|-----------------|-----------------|-----------------|----------------|
| 1.10<br>[27.94] | 0.48<br>[12.19] | 0.50<br>[12.70] | 0.036<br>[0.91] | 0.37<br>[9.40] |

**REVISION HISTORY**

| REV | ECN | DESCRIPTION   | SIGN & DATE |            |      |            |
|-----|-----|---------------|-------------|------------|------|------------|
|     |     |               | BY          | DATE       | CHK  | DATE       |
| B   | —   | UPDATED SPEC. | TDK         | 5/09/0     | JLAU | 5/09/0     |
| C   | —   | UPDATED SPEC. | TN          | 07/11/2020 | JL   | 07/11/2020 |



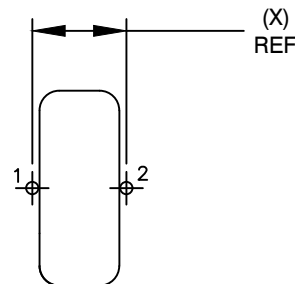
**FRONT VIEW**



**SIDE VIEW**

**DC BIAS TABLE**

| DC<br>BIAS<br>(AMP) | L@ 1KHz<br>(REF) |
|---------------------|------------------|
| 0                   | 144uH            |
| 1                   | 142uH            |
| 2                   | 140uH            |
| 4                   | 135uH            |
| 4.5                 | 132uH            |



**MOUNTING HOLES PATTERN**

| 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>1510 E. Edinger Ave.<br>Unit B. Santa Ana, CA. 92705 |                  |              |
| DRAWN      | TDK  | 2/8/04   | TITLE: TOROIDAL POWER INDUCTOR<br>150uH, 4.5 Amps, Vertical                          |                  |              |
| CHECKED    | JLAU | 2/9/04   |                                                                                      |                  |              |
| ENGR.      | KSUM | 3/5/0    |                                                                                      |                  |              |
| APPR.      | JLAU | 3/6/04   |                                                                                      |                  |              |
|            |      |          | SIZE                                                                                 | DWG. NO.         | REV          |
|            |      |          | B                                                                                    | HF229-151M-4.5AV | C            |
|            |      |          | SCALE 2=1                                                                            |                  | SHEET 1 OF 1 |

| UNLESS OTHERWISE SPECIFIED                       |  |  |  |
|--------------------------------------------------|--|--|--|
| DIMENSIONING AND TOLERANCE PER ANSI Y14.5M       |  |  |  |
| ALL DIMENSIONS ARE IN INCHES AND [MILLIMETERS].  |  |  |  |
| TOLERANCE INCHES: .XXX=±.005 .XX=±.015 <I=±0°30' |  |  |  |
| TOLERANCE METRICS: .XXX=±.127 .XX=±.38 <I=±0°30' |  |  |  |
| ANGLE PROJECTION                                 |  |  |  |
| DO NOT SCALE DRAWING                             |  |  |  |