REQUIREMENTS:

1. GENERAL:
   A. INTERPRET DRAWING IN ACCORDANCE WITH THE STANDARDS PRESCRIBED BY MIL-D-70327.
   B. UNITS SHALL CONFORM TO THE REQUIREMENTS OF MIL-C-15505 TYPE L4AL, GRADE 1, CLASS B AS MODIFIED BY THE REQUIREMENTS OF THIS DRAWING.
   C. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS CONTAINED IN ND 1015401.
   D. UNITS SHALL BE CAPABLE OF MEETING THE QUALIFICATION REQUIREMENTS OF ND 1005560 EXCEPT THAT IMMERSION PER MIL-C-15505 SHALL BE METHOD A (NO SALT).
   E. UNITS SHALL BE PERMANENTLY AND LEGIBLY MARKED, PER ND 1002019, WITH THE INDUCTANCE VALUE RANGE, DC RESISTANCE, AND NASA PART NUMBER (DRAWING NUMBER AND REVISION LETTER).
   F. PREPARATION FOR DELIVERY SHALL BE IN ACCORDANCE WITH ND 1002215, GRADE 1, CODE 1.
   1. MARKING OF SHIPPING CONTAINERS SHALL CONFORM TO THE MARKING OF UNIT AND INTERMEDIATE PACKAGES AND THE METHODS OF MARKING AS SPECIFIED IN ND 1002215.

2. ACCEPTANCE AND INSPECTION:
   A. MECHANICAL PROPERTIES:
      1. DIMENSIONS: AS DELINATED HEREBIN.
      2. LEAD MATERIAL: WELDABLE, GOLD PLATED IRON-NICKEL ALLOY (CUCUR) PER ND 1015401. MATERIAL SHALL BE CERTIFIED WITH EACH SHIPMENT. THE EXPOSED PORTION OF THE LEADS SHALL BE FREE OF SOLDER.
      3. TORQUE:
         a) STARTING: 0.1 IN OZ MINIMUM
         b) PREVALENCE: 2.5 IN OZ MAXIMUM
         c) MAXIMUM TORQUE UNIT SHALL BE CAPABLE OF WITHSTANDING 7.5 IN OZ MAX. WITH THE TUNING SLUG AT EITHER STOP. UTMOST CARE SHOULD BE USED NOT TO EXCEED THIS LIMIT.
   B. ELECTRICAL CHARACTERISTICS:
      1. INDUCTANCE TUNING RANGE: FROM 8 MICROHENRIES TO 85 MICROHENRIES USING THE SAME EQUIPMENT SPECIFIED IN ND 1005560.
      2. DIGESTANCE:
         a) AT 100 VRMS BETWEEN WINDING AND THE TUNING SLUG WHEN IN THE MAXIMUM INDUCTANCE POSITION.
      3. DC RESISTANCE: 1.9 OHMS MAX.
      4. RESONANT FREQUENCY: 15 MEGACYCLES MINIMUM.
      5. TEMPERATURE: TEMP COEF: ±150 PPM/°C FROM 0°C TO 70°C. TEST ONE (1) SAMPLE PER LOT
      6. TEST VOLTAGE: 100 VRMS BETWEEN WINDING AND THE TUNING SLUG WHEN IN THE MAXIMUM INDUCTANCE POSITION.
      7. DISTRIBUTED CAPACITANCE: TWO (2) FREQUENCY METHOD
         a) PICOFARADS ±5% AT 15 MICROHENRIES
         b) PICOFARADS ±5% AT 91 MICROHENRIES
         c) PICOFARADS ±5% AT 91 MICROHENRIES

C. VENDOR SUPPLIED DATA:
   1. CERTIFICATE OF COMPLIANCE TO ND 1015400.
   2. CERTIFICATE OF COMPLIANCE WITH MIL-C-15505.
   3. CERTIFICATE OF COMPLIANCE WITH SPECIAL CONDITIONING.
   4. TEST DATA FROM SPECIAL CONDITIONING.

D. DESIGN:
   1. OPERATING LIFE: 2000 HOURS MINIMUM AT MAXIMUM CURRENT AND TEMPERATURE RATINGS. THE ADJUSTMENT SCREW SHALL BE CAPABLE OF 100 CYCLES OF OPERATION. ONE CYCLEEquals ADJUSTMENT ALL THE WAY IN AND ALL THE WAY OUT.
   2. CONSTRUCTION: PLASTIC CASE WITH AN ALUMINUM (LEAD SCREW) TUNING SHIFT WHICH CONTROLS THE BORRED PEFUSION SLUG. THE UNIT SHALL HAVE AN ADDITIVE 40° RING SEAL ON THE TUNING SHAFT TO PREVENT POTTING AND MOISTURE PENETRATION.
   3. OPERATING TEMPERATURE RANGE: 0°C TO 70°C.
   4. CURRENT RATING (MAXIMUM): 450 MILLIAMPERES. UNDER THIS CONDITION THE TEMPERATURE RISE WILL BE 35°C SO THE AMBIENT SHOULD NOT EXCEED 70°C.
   5. LEAD FATIGUE: EACH LEAD SHALL BE CAPABLE OF MEETING THE PULL AND BEND TEST. HOWEVER THE SAME LEAD SHOULD NOT BE TESTED FOR BOTH. NO MECHANICAL DAMAGE OR LACK OF ELECTRICAL PERFORMANCE SHALL BE EVIDENCED AFTER THE TEST.
   6. BEND TEST: AN AXIAL PULL OF 4.0 POUNDS MINIMUM.
   7. TESTING: DISCARD TESTED UNITS.

E. SPECIAL CONDITIONING:
   1. EACH LOT SHALL BE TEMPERATURE CYCLED BY THE VENDOR AND TEST DATA SUPPLIED WITH EACH SHIPMENT.
   2. PERFORM SIX (6) CYCLES OF 125°C FOR 30 MIN, 25°C FOR 15 MIN, AND BEND TEST. AN AXIAL PULL OF 4.0 POUNDS MINIMUM.
   3. TEST DATA FROM SPECIAL CONDITIONING.
   4. EACH SHIPMENT SHALL BE ACCOMPANIED BY THE FOLLOWING DATA:
      a) CERTIFICATE OF COMPLIANCE TO ND 1015401.
      b) CERTIFICATE OF COMPLIANCE WITH LEAD MATERIAL.
      c) CERTIFICATE OF COMPLIANCE WITH SPECIAL CONDITIONING.
      d) TEST DATA FROM SPECIAL CONDITIONING.

F. IN USER'S APPLICATION:
   1. UNLESS OTHERWISE SPECIFIED, DRAWING COVERS NO MORE THAN 500 COMPONENTS.
   2. MATERIALS USED ARE MANUFACTURED TO MIL-C-15305 OR MIL-C-15306.
   3. UNLESS OTHERWISE SPECIFIED, DRAWING COVERS NO MORE THAN 500 COMPONENTS.
   4. UNLESS OTHERWISE SPECIFIED, DRAWING COVERS NO MORE THAN 500 COMPONENTS.

G. MATERIALS CATEGORIES:
   1. MATERIALS CATEGORIES:
      a) MATERIALS CATEGORIES:
      b) MATERIALS CATEGORIES:
      c) MATERIALS CATEGORIES:

H. NOTICE:
   1. WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A GOVERNMENT CONTRACT, THE GOVERNMENT RETAINS ALL RIGHTS, TITLE, AND PROPRIETARY INTEREST IN THE DATA, INFORMATION, AND MATERIALS CONTAINED THEREIN. IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT THE SALE OR RE-CERTIFICATION OF ANY PATENTED INVENTION THAT MAY BE RELATED THERETO, IN ANY WAY, IS PROHIBITED. ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY BE RELATED THERETO, IN ANY WAY, IS PROHIBITED.