**REQUIREMENTS:**

1. **GENERAL:**
   - Interpreting drawing in accordance with the standards prescribed by MIL-D-70327.
   - Units shall conform to the requirements of MIL-T-77, grade 5, class 3, except as, and in addition to the requirements, specified herein.
   - Supplier shall conform to the quality assurance provisions contained in ND 1015404, class 2.
   - Units shall be capable of meeting the qualification requirements of ND 1002047.
   - Part marking: Units shall be permanently and legibly marked, in accordance with ND 1002047, with the manufacturer's name and/or symbol, lot code, serial number, terminal identification, and NASA part number (drawing number and revision letter).
   - Preparation for delivery shall be in accordance with ND 1002219, class 3, code 1.
   - Marking of shipping containers shall conform to the marking of unit and intermediate packages and methods of marking as specified in ND 1002219.

2. **ACCEPTANCE AND INSPECTION (100% UNLESS OTHERWISE SPECIFIED):**
   - **A. MECHANICAL PROPERTIES:**
     1. Dimensions: As delineated herein.
   - **B. ELECTRICAL CHARACTERISTICS:**
     1. **(1) STANDARD TEST CONDITIONS:**
        - Input voltage (across leads 1 & 2): 35 Vrms ± 2%, 400 ± 1% sine wave with 1% harmonic distortion.
        - No load across leads 6 & 5 and no control current (leaks 6 & 7).
     2. **(2) PRIMARY (LEADS 1 AND 3, CENTER-TAPPED AT 2):**
        - Parallel inductance (standard test condition): 500 microhenries minimum.
        - Secondary (leads 1 and 3): 100 millihenries ± 20%.
        - Centertap balance (standard test condition): Voltages measured from center tap to either end shall not be such that the smaller shall be no less than 90% of the larger.
        - DC resistance (1-3): 2.4 ohms maximum.
        - DC resistance (2): 2 ohms maximum.
     3. **(3) SECONDARY (LEADS 4 AND 5):**
        - Voltage: 275 Vrms ± 2% (standard test conditions)
        - DC resistance: 20 ohms maximum.

A. OPERATING LIFE: Units shall be capable of continuous unattended operation as specified herein for 2000 hours.

B. **CONSTRUCTION:**
   - **(1) Assembly:** Units shall be encapsulated with a minimum potting coverage of 1.0 inch over core and windings.
   - **(2) Lead Material:** Weldable, undated, annealed nickel per N0 1015400.
   - **(3) Lead Strength:** Each lead shall be capable of meeting the following tests - however the same lead will not be tested for both. No mechanical damage to encapsulant or lack of electrical performance shall be evidenced per MIL-D-70327.
   - **(4) Internal wire:** Magnet wire shall be 0.0025 dia. (No. 42 AWG) minimum.

C. **SPECIAL CONDITIONING:**
   - **(1) Case:** Unit shall be encapsulated with a minimum potting coverage of 0.01 inch over core and windings.
   - **(2) Lead Material:** Weldable, undated, annealed nickel per N0 1015400.
   - **(3) Lead Strength:** Each lead shall be capable of meeting the following tests - however the same lead will not be tested for both. No mechanical damage to encapsulant or lack of electrical performance shall be evidenced per MIL-D-70327.
   - **(4) Internal Wire:** Magnet wire shall be 0.0025 dia. (No. 42 AWG) minimum.

D. **OPERATING CONDITIONS:**
   - **(1) Temperature:** Operate the unit at 85°C ambient for 50 hours in the burn-in test circuit (Fig. 1).
   - **(2) Measurements:** Inductance and DC resistance shall be measured and recorded before and after burn-in at (25°C) room temperature.
   - **(3) Rejection:** Any unit that changes more than 5% between initial and final measurement shall not be shipped.