REQUIREMENTS:

1. GENERAL:
   a. Interpreting drawing in accordance with standards prescribed by MIL-D-7027.
   b. Supplier shall conform to the quality assurance provisions specified in ND 101540: Class 2.
   c. Units shall be capable of meeting all qualification requirements specified in ND 1002045 unless modified or amended by design requirements section of this drawing.

2. PACKAGING AND PACKING:
   a. For dash numbers 1 thru 32 units packing shall be in accordance with ND 1002123, for dash numbers 33 thru 38 units shall be packed in such a manner as to assure the following:
      1) Each individual part shall be separated from all others and packed securely to prevent contact during transit.
      2) Leads shall be secured against whipping or vibration during transit.
      3) Body mounting shall be such that capacitors can be easily gripped by the body and removed from the package. Handling of leads is to be held to a minimum.
   d. Units shall meet all requirements of MIL-C-11015 except as specified herein.

3. DESIGN REQUIREMENTS:
   a. Per MIL-C-11015:20 in addition to the requirements specified herein.
   b. Operating at 100 volts, 100 volts at +85°C, derated to 50 volts at +125°C.
   c. Operating and storage temperature range: -5°C to +125°C, with the exception of high temperature exposure as indicated in Table 1.
   d. Lead strength: Leads shall withstand a 4 pound axial pull for one minute. They shall also withstand the following test twice: with a 2 pound load suspended from the lead in a vertical axial position, bend the capacitor body in a plane 90°, then back 180° to the opposite extreme, and then back to the starting position. The lead shall be bent at the point of egress from the capacitor body around a 1/4 inch radius. There shall be no physical damage or loss of electrical performance.
   e. Environmental:
      1) Reduced pressure: Units shall be operative during and after and shall sustain no damage as a result of exposure to 10^-4 mm of mercury for 96 hours.
      2) Life: Maximum capacitance change during life test per ND 1002045 shall be ±10%.

4. ELECTRICAL REQUIREMENTS:
   a. Capacitance: Per Table 1 at +25°C and 1MC/SEC ≈ 100 KC/SEC for capacitance values of 100 uF or less and at 1KC/SEC ≈ 100 CPS for capacitance values greater than 100 uF.
   b. Capacitance tolerance: ±10% at +25°C and 1MC/SEC ≈ 100 KC/SEC for capacitance values of 100 uF or less and at 1KC/SEC ≈ 100 CPS for capacitance values greater than 100 uF.
4. SPECIAL CONDITIONING BY SUPPLIERS:

A. BURN-IN: ALL UNITS SHALL BE SUBJECTED TO 2 TIMES RATED VOLTAGE AT 

+25°C FOR A MINIMUM OF 100 HOURS AND A MAXIMUM OF 300 HOURS. 

THE LAST 48 HOURS SHALL BE FREE OF CATASTROPHIC FAILURES. 

B. THE MANUFACTURER SHALL DETERMINE AND RECORD THE FOLLOWING 

ELECTRICAL CHARACTERISTICS PRIOR TO AND FOLLOWING 

BURN-IN:

CAPACITANCE
POWER FACTOR
INSULATION RESISTANCE

C. BURN-IN DATA SHALL BE INCLUDED WITH EACH SHIPMENT. THE 

DATA SHALL BE PRESENTED IN A MANNER THAT PROVIDES 

POSITIVE IDENTIFICATION OF EACH INDIVIDUAL CAPACITOR 

WITH THE INITIAL TEST READING, THE FINAL READING AND 

THE PERCENT CHANGE BETWEEN THE FINAL AND INITIAL READING. 

THE TEST DATA SUBMITTED SHALL ALSO IDENTIFY PARTS THAT 

FAIL TO MEET THE SPECIFIED REQUIREMENTS. HISTOGRAMS SHALL 

BE Plotted TO SHOW THE FREQUENCY DISTRIBUTION OF THE 

ABSOLUTE VALUE OF EACH CHARACTERISTIC AND TO SHOW THE 

FREQUENCY DISTRIBUTION OF THE PERCENT CHANGE OF EACH 

CHARACTERISTIC FROM ITS INITIAL READING. UNITS FAILING 

TO MEET INITIAL DRAWING REQUIREMENTS OR WHICH EXCEED 

THE SPECIFIED LIMITS FOR PARAMETRIC CHANGES FOLLOWING BURN-IN 

SHALL NOT BE ACCEPTABLE.

LIMITS:

CAPACITANCE: ±5% OF INITIAL READING
POWER FACTOR: INITIAL LIMIT
INSULATION RESISTANCE: INITIAL LIMIT

NOTES:

1. THESE DASH NUMBERS ARE NONSTANDARD VALUES PER MIL-C-11015/20.

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<th>DASH NO.</th>
<th>CAPACITANCE CHANGE (%)</th>
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<th>DIMENSIONS</th>
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PROCURE ONLY FROM APPROVED SOURCES LISTED ON 

ND 1002034 FOR THIS DRAWING.