**Insulation Resistance:** The product of Megohm and MicroFarads shall be 100 Megohm-MicroFarads, min, need not exceed 10,000 Megohms.

**Power Factor:** 0.025 max, measured at +25°C and 1MC/SEC, ± 100 MC/SEC for capacitance values of 100 uuf or less and at 1MC/SEC ± 100 CPS for capacitance values greater than 100 uuf.

**Design Requirements:**
- MIL-C-11015/20 in addition to the requirements specified herein.
- DC working voltage: 100 volts at +85°C, derated to 50 volts at +125°C.
- Operating temperature range: -55°C to +125°C.

**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 leads 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. There shall be no physical damage or loss of electrical performance.

**Environmental:** 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.

**Life:** Maximum capacitance change during life test per ND 1002045 shall be ± 10%.

**Mechanical Requirements:**
- Dimensions per outline and Table 1.
- Lead data: Leads per ND 1015401, a certificate of compliance with this requirement shall accompany each shipment.
- Marking: Per MIL-STD-130, each capacitor shall be permanently and legibly marked with the NASA part number and revision letter and serial number to indicate completion of burn-in, capacitance, capacitance tolerance, and voltage rating may also be marked on part. Each container shall also contain the NASA drawing and dash number together with the revision letter, manufacturers part or type number may appear on the part and package.

**Electrical Requirements:**
- Capacitance: Per Table 1 at +25°C and 1MC/SEC ± 100 KC/SEC for capacitance values of 100 uuf or less and at 1KC/SEC ± 100 CPS for capacitance values greater than 100 uuf.
- Capacitance tolerance: ± 10% at +25°C and 1MC/SEC ± 100 KC/SEC for capacitance values of 100 uuf or less and at 1KC/SEC ± 100 CPS for capacitance values greater than 100 uuf.

**Testing and Acceptance:**
- Inspection and acceptance: Mechanical requirements.
- Dimensions per outline and Table 1.
- Lead data: Leads per ND 1015401, a certificate of compliance with this requirement shall accompany each shipment.
- Marking: Per MIL-STD-130, each capacitor shall be permanently and legibly marked with the NASA part number and revision letter and serial number to indicate completion of burn-in, capacitance, capacitance tolerance, and voltage rating may also be marked on part. Each container shall also contain the NASA drawing and dash number together with the revision letter, manufacturers part or type number may appear on the part and package.

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SPECIAL CONDITIONING BY SUPPLIERS
BURN-IN: ALL UNITS SHALL BE SUBJECTED TO 2 TIMES RATED VOLTAGE AT
85°C FOR A MINIMUM OF 100 HOURS AND A MAXIMUM OF 300 HOURS. THE
LAST 48 HOURS SHALL BE FREE OF CATASTROPHIC FAILURES.

THE MANUFACTURER SHALL DETERMINE AND RECORD THE FOLLOWING
ELECTRICAL CHARACTERISTICS PRIOR TO AND FOLLOWING
BURN-IN:
- CAPACITANCE
- POWER FACTOR
- INSULATION RESISTANCE

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 SHARING 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.

PROCURE ONLY FROM APPROVED SOURCES LISTED ON
NO 1002034 FOR THIS DRAWING.