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INCH-POUND

MIL-PRF-14409D  
AMENDMENT 6  
3 May 1994  
SUPERSEDING  
AMENDMENT 5  
8 July 1993

PERFORMANCE SPECIFICATION  
CAPACITORS, VARIABLE (PISTON TYPE, TUBULAR TRIMMER),  
GENERAL SPECIFICATION FOR

This amendment forms part of MIL-PRF-14409D, dated 15 April 1975, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

TABLE I, add:

" K--- | -55 to +125 | 0 ± 75 | ±.18% of maximum rated value or  
|.03 pF (whichever is greater). | "

PAGE 2

- 2.1, STANDARDS, MILITARY: Delete "MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes."

PAGE 3

3.6, delete in its entirety.

PAGE 5

3.26, line two: Delete "source codes" and substitute "lot codes".

3.27.1, delete and substitute

"3.27.1 Solderability. Where soldering is employed in the construction of capacitors, only fluxes with low corrosive properties shall be used, unless it can be shown that corrosive elements have been satisfactorily removed after soldering. All excess flux and solder shall be removed. Electrical connections shall be electrically continuous after solder and, where possible, mechanically secure before soldering."

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TABLE II, first column: Group I, delete "Burn-in" test and all related data.

\* TABLE III, delete and substitute:

" TABLE III Group A inspection.

Inspection	Requirement paragraph	Test paragraph	Sampling procedure
Thermal shock (styles PC21, PC22, PC23, PC24, PC26, PC27, PC28, PC29, PC30, PC32 and PC34)	3.5	4.6.1	100% inspection
Visual and mechanical examination:		4.6.3	
Material	3.3		13 samples 0 failures
Body dimensions	3.4		
Design and construction (other than body dimensions)	3.1, 3.4 through 3.4.4		
Marking 1/ Workmanship	3.26 3.27 and 3.27.1		
Capacitance	3.7	4.6.4	13 samples 0 failures
Change of capacitance	3.8	4.6.5	
Insulation resistance (at 25°C)	3.9	4.6.6	
Dielectric withstanding voltage 2/	3.10	4.6.7	
Quality factor (Q)	3.11	4.6.8	
Driving torque (room ambient temperature)	3.12.1	4.6.9.1.2.1	

1/ Marking defects are based on visual examination only, and will be charged only for illegible, incomplete, or incorrect marking. Any subsequent electrical defects will not be used as a basis for determining marking defects.

2/ Dielectric withstanding voltage will be during capacitor cycle. "

\* 4.5.1.1.1.1, delete and substitute:

"4.5.1.1.1.1 Sampling plan. The sampling plan shall be as specified in table III."

\* 4.5.1.1.1.2, delete and substitute:

"4.5.1.1.1.2 Rejected lots. If one or more defects are found, the lot shall be rescreened and the defects removed. After screening and removal of defects, a new sample of parts shall be randomly selected in accordance with table III. If one or more defects are found in the second sample, the lot shall be rejected and shall not be supplied to this specification."

\* TABLE IV, delete and substitute:

TABLE IV Group B inspection.

Test	Requirement paragraph	Test paragraph	Sampling procedure
Seal (sealed units only)	3.23	4.6.20	5 samples 0 failures
Torque, bushing strength (panel-mount units only)	3.12.2	4.6.9.2	
Solderability (all solderable terminals)	3.25	4.6.22	

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\* 4.5.1.1.2.1, delete and substitute:

"4.5.1.1.2.1 Sampling plan. The sampling plan shall be as specified in table IV."

\* 4.5.1.1.2.2, delete and substitute:

"4.5.1.1.2.2 Rejected lots. If one or more defects are found, the lot shall be screened or reworked and defects removed. After screening or rework, and the removal of defects, a new sample of parts shall be randomly selected in accordance with table IV. If one or more defects are found in the second sample, the lot shall be rejected and shall not be supplied to this specification.

4.5.1.1.2.3 Disposition of sample units. Sample units which have been subjected to group B inspection shall not be delivered on the contract or order."

TABLE V, test column: Subgroups III and V, delete "1/".

TABLE V, test column: Subgroup III, add "2/".

TABLE V, bottom of table, add "2/ Electrical tests are not required on unsealed units."

PAGE 10

4.6.2, delete in its entirety.

PAGE 12

TABLE VII, delete and substitute:

" TABLE VII. Torque.

Bushing size	Torque $\pm 0.1$ (pound-inches)
.120	1.2
.190-64	3.0
.234	5.0
.190-32	6.0
.250	8.0

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4.6.12.2, delete and substitute:

"4.6.12.2 Salt spray (corrosion) (unsealed units only) (see 3.15.2). Capacitors shall be tested in accordance with method 101 of MIL-STD-202. The following details shall apply:

- a. Test condition: B.
- b. Measurement after test not required.
- c. Capacitors shall be examined for evidence of corrosion."

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20.2(c), at the end of the paragraph: Add "or table X."

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After table IX, add:

"TABLE X. Extent of qualification by type designations.

Type designation submitted	Number of samples submitted	Type designations qualified
PC26J060 PC29J100	25 25	PC25J060 PC26J060 PC29J100 PC31J060
PC25J200 PC26T200	25 25	PC25J200 PC26T200 PC26J200 PC31J200
PC26T100 PC31J100	25 25	PC25J200 PC26T100 PC26J100 PC31J100 PC34T100
PC29J050 PC30J3R5	25 25	PC27J3R5 PC28J3R5 PC28J050 PC29J3R5 PC29J050 PC30J3R5
PC26T140 PC32T140	25 25	PC25J140 PC26T140 PC26J140 PC31J140 PC32T140
PC21J1R2 PC22K2R5 PC23J4R5 PC24K080	25 25 25 25	PC21**** PC22**** PC23**** PC24****

The margins of this amendment are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

CONCLUDING MATERIAL

Custodians:  
Army - ER  
Navy - EC  
Air Force - 85

Review activities:  
Navy - AS, CG, MC, OS  
DLA - ES

Preparing activity:  
Army - ER

Agent:  
DLA - ES

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