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December 5, 2003

MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: Initial Draft of MIL-PRF-49137/1C, MIL-PRF-49137/2C, MIL-PRF-49137/5B and
MIL-PRF-49107/6D
Project 5910-2241-01, 5910-2241-02, 5910-2241-03 and 5910-2241-04

The initial draft of the above subject document is now available for viewing and downloading from the DSCC-VA web site:

<http://www.dsccl.dla.mil/Programs/MilSpec/DocSearch.asp>

If you wish to review this document, you may download it by using the link above. Once on that page, enter MIL-PRF-49137 in the blank box to the left of the GO box and select GO. Select the appropriate links to download the initial draft. Initial drafts are identified with "(Initial Draft)" after the document number.

This document was revised to include the slash sheets into the basic, to update the document to the proper format, and to make editorial corrections.

Concurrence or comments are required at this Center no later than January 26, 2004 (45 days). Comments from military departments must be identified as either "Essential" or "Suggested". Essential comments must be justified with supporting data. Military review activities should forward comments to their custodians or this office, as applicable, in sufficient time to allow for considering the department reply.

Please forward your comments or concurrence electronically to the project engineer listed below. This can be done in the form of a return email, with or without an attached text file. If an electronic response is not possible, we will accept comments via letter, facsimile, or phone call; but only after you have contacted the project officer. Any further coordination concerning these documents will be circulated only to firms and organizations that furnish comments or reply that they have an interest.

The point of contact for these documents is Mr. Ken Bernier, DSCC-VAT. The preferred method of contact is via email: kenneth.bernier@dla.mil. Mr. Bernier can also be reached by phone at 614-692-0563/DSN 850-0563, or by facsimile 614-693-1644.

KENDALL A. COTTONGIM
Chief
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NOTE: This draft, dated 5 December 2003, prepared by DLA-CC, has not been approved and is subject to modification. DO NOT USE PRIOR TO APPROVAL. (Project 5910-2241-03) P.O.C. Ken Bernier 614-692-0563 kenneth.bernier@dla.mil.

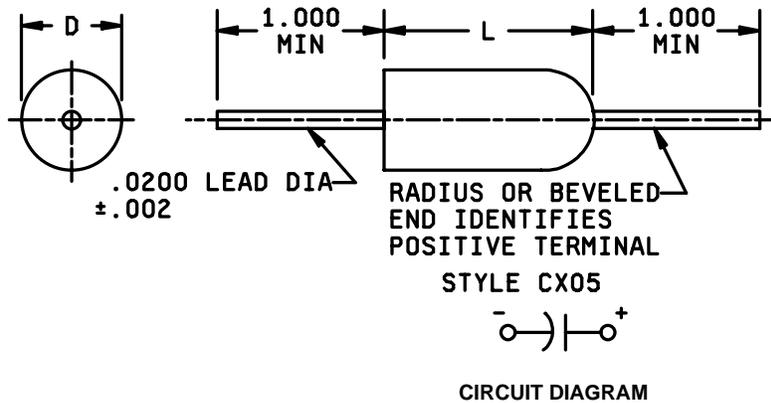
INCH-POUND
MIL-PRF-49137/5B
DRAFT
SUPERSEDING
MIL-PRF-49137/5A
9 October 1997

PERFORMANCE SPECIFICATION SHEET

CAPACITORS, FIXED, ELECTROLYTIC (SOLID ELECTROLYTE), TANTALUM, POLAR, MOLDED, NONHERMETICALLY SEALED, STYLE CX05

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-PRF-49137.



Case size	Dimensions	
	Diameter D ±.015 (0.38)	Length L ±.020 (0.51)
A	.085 (2.16)	.250 (6.35)
B	.100 (2.54)	.280 (7.11)
C	.170 (4.32)	.335 (8.51)
D	.170 (4.32)	.410 (10.41)

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Metric equivalents are in parentheses.

FIGURE 1. Dimensions and configuration.

TABLE I. Style CX05 characteristics.

Type designation ^{1/}	DC rated voltage (85°C)	Capacitance (nominal)	DC leakage (max) +25°C	Dissipation factor	Case size
	<u>Volts</u>	<u>μF</u>	<u>μA</u>	<u>%</u>	
CX05D475-	6	4.7	1.0	6	A
CX05D156-	6	15	1.0	8	B
CX05D336-	6	33	1.5	8	C
CX05D476-	6	47	3.0	8	D
CX05F335-	10	3.3	1.0	6	A
CX05F106-	10	10	1.0	8	B
CX05F226-	10	22	1.5	8	C
CX05F276-	10	27	2.0	8	D
CX05F336-	10	33	3.0	8	D
CX05F396-	10	39	5.0	8	D
CX05F476-	10	47	5.0	8	D
CX05H225-	15	2.2	1.0	6	A
CX05H685-	15	6.8	1.0	6	B
CX05H156-	15	15	1.5	8	C
CX05H226-	15	22	3.0	8	D
CX05H336-	15	33	5.0	8	D
CX05J155-	20	1.5	1.0	6	A
CX05J475-	20	4.7	1.0	6	B
CX05J126-	20	12	1.0	8	D
CX05J156-	20	15	3.0	8	D
CX05K105-	25	1.0	1.0	4	A
CX05K225-	25	2.2	1.0	6	B
CX05K335-	25	3.3	1.0	6	B
CX05K685-	25	6.8	1.5	6	C
CX05K106-	25	10	1.5	8	C
CX05M334-	35	0.33	1.0	4	A
CX05M474-	35	0.47	1.0	4	A
CX05M155-	35	1.5	1.0	6	B
CX05M335-	35	3.3	1.5	6	C
CX05M395-	35	3.9	1.5	6	C
CX05M475-	35	4.7	1.5	6	C
CX05M685-	35	6.8	3.0	6	D
CX05M106-	35	10	5.0	8	D
CX05N104-	50	0.10	1.0	4	A
CX05N154-	50	0.15	1.0	4	A
CX05N224-	50	0.22	1.0	4	A
CX05N334-	50	0.33	1.0	4	B
CX05N474-	50	0.47	1.0	4	B
CX05N684-	50	0.68	1.0	4	B
CX05N105-	50	1.0	1.0	4	B
CX05N155-	50	1.5	1.5	6	C
CX05N225-	50	2.2	1.5	6	C
CX05N335-	50	3.3	2.0	6	D
CX05N475-	50	4.7	3.0	6	D

^{1/} Complete type designation will include an additional symbol indicating capacitance tolerance.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

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Case material: Molded, epoxy or plastic.

Leads: Solder-coated metal.

DC rated voltage: See table I.

Operating temperature: -55° to +85°C.

DC leakage (DCL): See table I.

Capacitance (cap.): See table I.

Cap. tolerance: $\pm 10\%$ (K), or $\pm 20\%$ (M).

Dissipation factor (DF): See table I.

Stability at low and high temperature: In accordance with MIL-PRF-49137.

Step 1 (+25°C): DCL - See table I.
Cap. - Within tolerance specified in table I.
DF - See table I.

Step 2 (-55°C): Δ Cap. - Within -15 percent of step 1 measured value.
DF - 200 percent of table I.

Step 3 (+25°C): DCL - See table I.
 Δ Cap. - Within 10 percent of step 1 measured value.
DF - See table I.

Step 4 (+85°C): DCL - 10 times 25°C limit (see table I).
 Δ Cap. - Within +15 percent of step 1 measured value.
DF - 150 percent of table I.

Step 5 (+25°C): DCL - See table I.
 Δ Cap. - Within 10 percent of step 1 measured value.
DF - See table I.

Surge voltage: In accordance with MIL-PRF-49137.

DCL - See table I.
 Δ Cap. - Within 10 percent of initial value.
DF - See table I.

Life: Method 108 of MIL-STD-202.

1,000 hours:
At 25°C: DCL - 200 percent of table I.
 Δ Cap. - Within 10 percent of initial measured value.
DF - See table I.

MIL-PRF-49137/5B

These capacitors are intended to be used only where supplemental moisture protection is provided or for noncritical applications where hermetic moisture protection is not required.

Changes from previous issues. The margins of this specification are marked with asterisks to indicate where changes from previous issue 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 issue.

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Review activities:

Navy - AS, MC, OS, SH
Air Force - 19, 99

Preparing activity:

Army - CR

Agent:

DLA - CC

(Project 5910-2241-03)