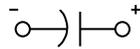
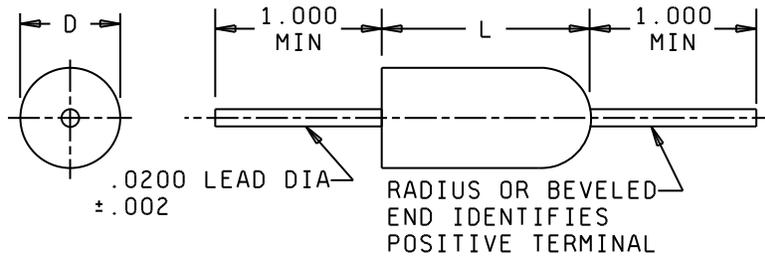


PERFORMANCE SPECIFICATION SHEET

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

This specification sheet 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 sheet and [MIL-PRF-49137](#).



CIRCUIT DIAGRAM

Dimensions		
Case size	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.

Part or identifying number (PIN) <u>1/</u>	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 PIN will include an additional symbol indicating capacitance tolerance.

REQUIREMENTS:

Dimensions and configuration: See [figure 1](#).

Case material: Molded, epoxy or plastic.

Leads: Solder-coated metal.

DC rated voltage: See [table I](#).

Operating temperature: -55°C 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):  $\Delta$ Cap. - Within  $\pm 15$  percent of step 1 measured value.  
DF - 200 percent of [table I](#).
- Step 3 (+25°C): DCL - See [table I](#).  
 $\Delta$ Cap. - Within  $\pm 10$  percent of step 1 measured value.  
DF - See [table I](#).
- Step 4 (+85°C): DCL - 10 times +25°C limit (see [table I](#)).  
 $\Delta$ Cap. - Within  $\pm 15$  percent of step 1 measured value.  
DF - 150 percent of [table I](#).
- Step 5 (+25°C): DCL - See [table I](#).  
 $\Delta$ Cap. - Within  $\pm 10$  percent of step 1 measured value.  
DF - See [table I](#).

Surge voltage: In accordance with [MIL-PRF-49137](#).

- DCL - See [table I](#).
- $\Delta$ Cap. - Within  $\pm 10$  percent of initial value.
- DF - See [table I](#).

Life: In accordance with [method 108 of MIL-STD-202](#).

- 1,000 hours:
  - At +25°C: DCL - 200 percent of [table I](#).
  - $\Delta$ Cap. - Within  $\pm 10$  percent of initial measured value.
  - DF - See [table I](#).

NOTE: 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.

Reference documents. In addition to [MIL-PRF-49137](#), this specification sheet references the following:

[MIL-STD-202](#)

Changes from previous issues. The margins of this specification are marked with vertical lines 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.

Custodians:

Army - CR  
Navy - EC  
Air Force – 85  
DLA – CC

Preparing activity:

Army - CR

Agent

DLA - CC

Review activities:

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

(Project 5910-2014-019)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.