

PERFORMANCE SPECIFICATION SHEET

CAPACITORS, FIXED, ELECTROLYTIC (SOLID ELECTROLYTE), TANTALUM,
POLAR, NONHERMETICALLY SEALED,
STYLES CX06 AND CX16

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.

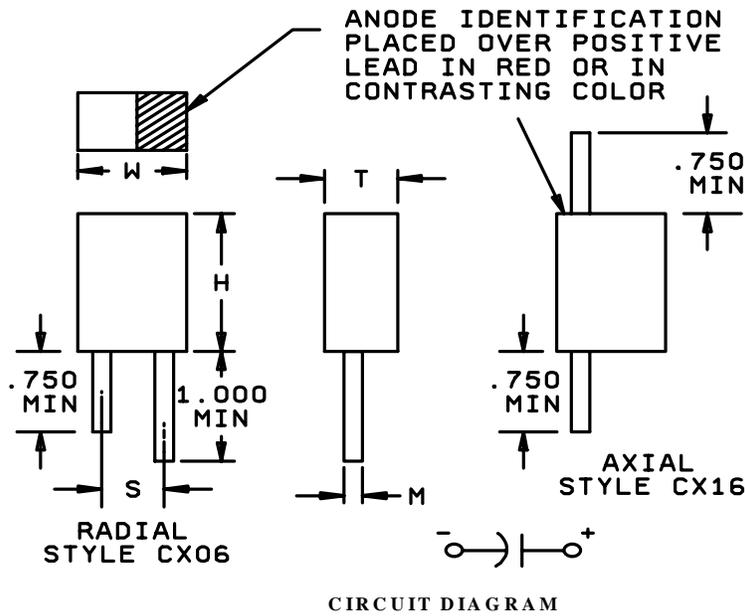


FIGURE 1. Styles CX06 and CX16 capacitors.

MIL-PRF-49137/6C

Case size	Dimensions				
	T	W	H	M	S
	Max	Max	Max	±.002	
A	.040	.050	.100	.007	.030 ±.015
B	.040	.070	.125	.010	.050 ±.015
C	.070	.120	.165	.010	.100 ±.020
D	.075	.185	.225	.010	.150 ±.020
E	.110	.220	.290	.016	.180 ±.025
F	.130	.230	.310	.016	.200 ±.025
G	.150	.375	.475	.016	.300 ±.025

Inches	mm	Inches	mm	Inches	mm	Inches	mm
.002	0.05	.040	1.02	.130	3.30	.230	5.84
.007	0.18	.050	1.27	.150	3.81	.290	7.37
.010	0.25	.070	1.78	.165	4.19	.300	7.62
.015	0.38	.075	1.90	.180	4.57	.310	7.87
.016	0.41	.100	2.54	.185	4.70	.375	9.52
.020	0.51	.110	2.79	.200	5.08	.475	12.06
.025	0.64	.120	3.05	.220	5.59	.750	19.05
.030	0.76	.125	3.18	.225	5.72	1.000	25.40

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. The positive lead on CX06 shall be at least .125 inch (3.18 mm) longer than the negative lead.

FIGURE 1. Styles CX06 and CX16 capacitors - Continued.

TABLE I. Styles CX06 and CX16 characteristics.

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Type designation <u>1/</u>	DC rated voltage (85°C)	Nominal capacitance	Dissipation factor (max)	DC leakage (max) 25°C	Case size
	<u>Volts</u>	<u>μF</u>	<u>%</u>	<u>μA</u>	
CX-6A474-	2	.47	10	.5	A
CX-6A225-	2	2.2	10	.5	B
CX-6A106-	2	10.0	10	.5	C
CX-6B155-	3	1.5	10	.5	B
CX-6B685-	3	6.8	10	.5	C
CX-6B226-	3	22.0	10	1.0	D
CX-6B227-	3	220.0	15	9.0	G
CX-6C334-	4	.33	10	.5	A
CX-6C105-	4	1.0	8	.5	B
CX-6C475-	4	4.7	8	.5	C
CX-6C156-	4	15.0	8	1.0	D
CX-6C476-	4	47.0	8	2.0	E
CX-6C686-	4	68.0	8	3.0	F
CX-6D224-	6	.22	10	.5	A
CX-6D684-	6	.68	6	.5	B
CX-6D335-	6	3.3	6	.5	C
CX-6D106-	6	10.0	6	1.0	D
CX-6D336-	6	33.0	6	2.0	E
CX-6D476-	6	47.0	6	3.0	F
CX-6D157-	6	150.0	10	9.0	G
CX-6F154-	10	.15	10	.5	A
CX-6F474-	10	.47	6	.5	B
CX-6F225-	10	2.2	6	.5	C
CX-6F685-	10	6.8	6	1.0	D
CX-6F226-	10	22.0	6	2.0	E
CX-6F336-	10	33.0	6	3.0	F
CX-6F107-	10	100.0	8	9.0	G
CX-6H104-	15	.10	10	.5	A
CX-6H334-	15	.33	6	.5	B
CX-6H155-	15	1.5	6	.5	C
CX-6H156-	15	15.0	6	2.0	E
CX-6H226-	15	22.0	6	3.0	F
CX-6H686-	15	68.0	8	9.0	G
CX-6J104-	20	.10	6	.5	B
CX-6J154-	20	.15	6	.5	B
CX-6J224-	20	.22	6	.5	B
CX-6J105-	20	1.0	6	.5	C
CX-6J335-	20	3.3	6	1.0	D
CX-6J475-	20	4.7	6	1.0	D
CX-6J106-	20	10.0	6	2.0	E
CX-6J156-	20	15.0	6	3.0	F
CX-6J476-	20	47.0	8	9.0	G
CX-6K684-	25	.68	6	.5	C
CX-6K225-	25	2.2	6	1.0	D
CX-6K685-	25	6.8	6	2.0	E
CX-6K106-	25	10.0	6	3.0	F
CX-6K336-	25	33.0	6	9.0	G

TABLE I. Styles CX06 and CX16 characteristics. Continued.

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Type designation ^{1/}	DC rated voltage (85°C)	Nominal capacitance	Dissipation factor (max)	DC leakage (max) 25°C	Case size
CX-6M104-	35	.10	6	.5	C
CX-6M154-	35	.15	6	.5	C
CX-6M224-	35	.22	6	.5	C
CX-6M334-	35	.33	6	.5	C
CX-6M474-	35	.47	6	.5	C
CX-6M684-	35	.68	6	1.0	D
CX-6M105	35	1.0	6	1.0	D
CX-6M155-	35	1.5	6	1.0	D
CX-6M225-	35	2.2	6	2.0	E
CX-6M335-	35	3.3	6	2.0	E
CX-6M475	35	4.7	6	2.0	E
CX-6M685	35	6.8	6	3.0	F
CX-6M106-	35	10.0	6	9.0	G
CX-6M156	35	15.0	6	9.0	G
CX-6M226-	35	22.0	6	9.0	G

^{1/} Complete type designation will include additional symbols to indicate style and capacitance tolerance.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

Case: Polyester sleeve and epoxy end filled or plastic encapsulated.

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.

Capacitance tolerance: ±10 percent (K), or ±20 percent (M).

Dissipation factor (DF): See table I.

Terminal strength: In accordance with method 211 of MIL-STD-202.

Test condition A: ½-pound for case sizes A and B, 1 pound for case sizes C and D, and 2 pounds for case sizes E, F, and G.

Test condition C: ½-pound applied force - 3 bends.

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

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

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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:

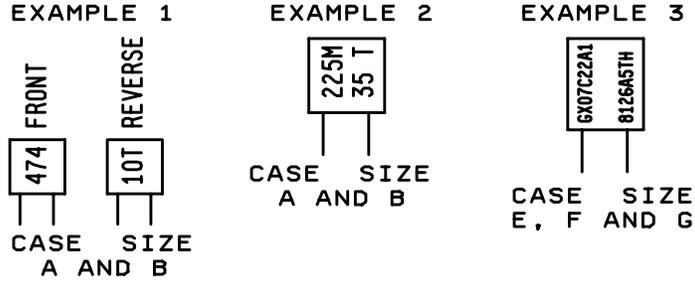
At 25°C: DCL - 200 percent of table I.
 Δ Cap. - Within 10 percent of initial measured value.
DF - See table I.

Resistance to solvents: Not applicable.

Marking: In accordance with MIL-PRF-49137, except that case sizes A and B, shall be marked as shown in example 1. The front shall be marked with the capacitance value coded in picofarads and the reverse shall be marked with the dc voltage and the manufacturer's trademark. Case sizes E, F, and G shall be marked as shown in example 3. The first line will contain the part number and the second shall contain the date code (year and week), lot code, and manufacturer's trademark.

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At the option of the manufacturer, color coding may be used to mark the capacitance, dc rated voltage, and manufacturer's trademark on case sizes A and B capacitance, dc rated voltage, and manufacturer's trademark on case sizes E, F, and G, as long as it is the same order as shown in the example.



Voltage groups (85°C rated voltage):
I-----2 to 10 V inclusive
II-----15 to 35 V inclusive

Revision letters are not used to denote change due to the extensiveness of the changes.

Custodians:
Army - CR
Navy - EC

Review activities:
Navy - AS, CG, MC, OS, SH
Air Force - 19, 85, 99
DLA - CC

Preparing activity:
Army - CR

Agent:
DLA - CC

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