

**INCH-POUND**  
**MIL-C-19978/16B**  
**18 June 2001**  
**SUPERSEDING**  
**MIL-C-19978/16A**  
**30 September 1982**

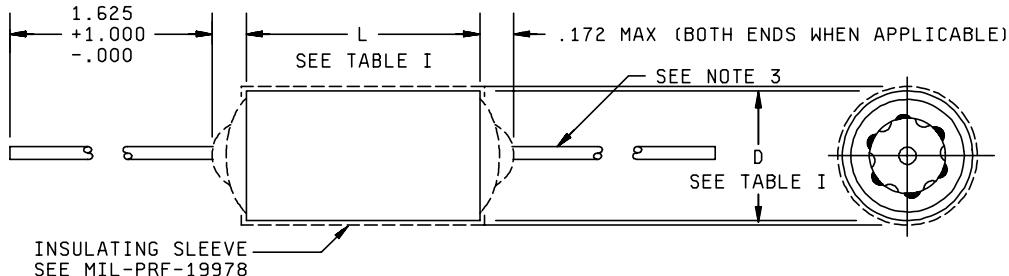
### MILITARY SPECIFICATION SHEET

**CAPACITORS, FIXED, PLASTIC (OR PAPER-PLASTIC) DIELECTRIC,  
AXIAL-WIRE TERMINAL, TUBULAR (INSULATED),  
(HERMETICALLY SEALED IN METAL CASES),  
ESTABLISHED RELIABILITY, STYLE CQR39**

**INACTIVE FOR NEW DESIGN  
AFTER 20 OCTOBER 1972**

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-19978.



Inches	mm	Inches	mm
.001	0.03	.312	7.92
.004	0.10	.400	10.16
.025	0.64	.562	14.27
.032	0.81	1.000	25.40
.172	4.37	1.562	39.67
.235	5.97	1.625	41.38

**NOTES:**

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Leads shall be of tinned solid wire, .025 (No. 22 AWG) for cases .235 and .312 in diameter; and .032 (No. 20 AWG) for cases .400 diameter and above. Tolerance on all lead wire diameters shall be + .004, -.001.
4. Capacitors with dimension L of 1.562 or D of .562 and larger, are not intended to be supported by their leads. These capacitors shall be supported with a supplementary means of mounting, such as a wrap-around band. The supporting device will not be supplied with the capacitor.
5. Lead length may be a minimum of 1.00 inch long for use in tape and reel packaging when specified in the ordering data.

**FIGURE 1. Style CQR39 capacitors.**

## REQUIREMENTS:

Dimensions and configuration: See figure 1 and table I.

TABLE I. Styles CQR39 capacitors.

Part or Identifying Number (PIN) 1/	DC voltage rating (volts)	Capacitance ( $\mu\text{F}$ )	Failure rate level	Case dimensions (inches) 2/ 3/			
				Circuit 1		Circuit 3	
				L ± .031	D+.015 -.005	L ± .031	D+.015 -.005
CQR39A-KB822K3-	100	.0082	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KB103K3-	100	.010	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KB123K3-	100	.012	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KB153K3-	100	.015	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KB393K3-	100	.039	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KB473K3-	100	.047	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KB823K3-	100	.082	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KB104K3-	100	.10	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KB124K3-	100	.12	M, P, R, S	1.125	0.400	1.062	0.400
CQR39A-KB154K3-	100	.15	M, P, R, S	1.125	0.400	1.062	0.400
CQR39A-KB184K3-	100	.18	M, P, R, S	1.375	0.400	1.312	0.400
CQR39A-KB224K3-	100	.22	M, P, R, S	1.375	0.400	1.312	0.400
CQR39A-KB274K3-	100	.27	M, P, R, S	1.125	0.562	1.062	0.562
CQR39A-KB334K3-	100	.33	M, P, R, S	1.125	0.562	1.062	0.562
CQR39A-KB394K3-	100	.39	M, P, R, S	1.375	0.562	1.312	0.562
CQR39A-KB474K3-	100	.47	M, P, R, S	1.375	0.562	1.312	0.562
CQR39A-KB564K3-	100	.56	M, P, R, S	1.625	0.562	1.562	0.562
CQR39A-KB684K3-	100	.68	M, P, R, S	1.625	0.562	1.562	0.562
CQR39A-KB824K3-	100	.82	M, P, R, S	1.625	0.670	1.562	0.670
CQR39A-KB105K3-	100	1.0	M, P, R, S	1.625	0.670	1.562	0.670
CQR39A-KC392K3-	200	.0039	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KC472K3-	200	.0047	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KC562K3-	200	.0056	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KC682K3-	200	.0068	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KC183K3-	200	.018	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KC223K3-	200	.022	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KC273K3-	200	.027	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KC333K3-	200	.033	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KC393K3-	200	.039	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KC473K3-	200	.047	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KC563K3-	200	.056	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KC683K3-	200	.068	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KC823K3-	200	.082	M, P, R, S	1.125	0.400	1.062	0.400
CQR39A-KC104K3-	200	.10	M, P, R, S	1.125	0.400	1.062	0.400
CQR39A-KC124K3-	200	.12	M, P, R, S	1.375	0.400	1.312	0.400
CQR39A-KC154K3-	200	.15	M, P, R, S	1.375	0.400	1.312	0.400
CQR39A-KC184K3-	200	.18	M, P, R, S	1.125	0.562	1.062	0.562
CQR39A-KC224K3-	200	.22	M, P, R, S	1.125	0.562	1.062	0.562
CQR39A-KC274K3-	200	.27	M, P, R, S	1.375	0.562	1.312	0.562
CQR39A-KC334K3-	200	.33	M, P, R, S	1.375	0.562	1.312	0.562
CQR39A-KC394K3-	200	.39	M, P, R, S	1.625	0.562	1.562	0.562
CQR39A-KC474K3-	200	.47	M, P, R, S	1.625	0.562	1.562	0.562
CQR39A-KC564K3-	200	.56	M, P, R, S	1.625	0.670	1.562	0.670
CQR39A-KC684K3-	200	.68	M, P, R, S	1.625	0.670	1.562	0.670

See footnotes at end of table.

TABLE I. Styles CQR39 capacitors - Continued.

Part or Identifying Number (PIN) 1/	DC voltage rating (volts)	Capacitance ( $\mu$ F)	Failure rate level	Case dimensions (inches) 2/ 3/			
				Circuit 1		Circuit 3	
				L ± .031	D+.015 -.005	L ± .031	D+.015 -.005
CQR39A-KC824K3-	200	.82	M, P, R, S	2.125	0.750	2.062	0.750
	200	1.0	M, P, R, S	2.125	0.750	2.062	0.750
CQR39A-KE272K3-	400	.0027	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KE332K3-	400	.0033	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KE123K3-	400	.012	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KE153K3-	400	.015	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KE273K3-	400	.027	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KE333K3-	400	.033	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KE393K3-	400	.039	M, P, R, S	1.125	0.400	1.062	0.400
CQR39A-KE473K3-	400	.047	M, P, R, S	1.125	0.400	1.062	0.400
CQR39A-KE563K3-	400	.056	M, P, R, S	1.375	0.400	1.312	0.400
CQR39A-KE683K3-	400	.068	M, P, R, S	1.375	0.400	1.312	0.400
CQR39A-KE823K3-	400	.082	M, P, R, S	1.125	0.562	1.062	0.562
CQR39A-KE104K3-	400	.10	M, P, R, S	1.125	0.562	1.062	0.562
CQR39A-KE124K3-	400	.12	M, P, R, S	1.375	0.562	1.312	0.562
CQR39A-KE154K3-	400	.15	M, P, R, S	1.375	0.562	1.312	0.562
CQR39A-KE184K3-	400	.18	M, P, R, S	1.625	0.562	1.562	0.562
CQR39A-KE224K3-	400	.22	M, P, R, S	1.625	0.562	1.562	0.562
CQR39A-KE274K3-	400	.27	M, P, R, S	1.625	0.670	1.562	0.670
CQR39A-KE334K3-	400	.33	M, P, R, S	1.625	0.670	1.562	0.670
CQR39A-KE394K3-	400	.39	M, P, R, S	2.125	0.750	2.062	0.750
CQR39A-KE474K3-	400	.47	M, P, R, S	2.125	0.750	2.062	0.750
CQR39A-KF102K3-	600	.0010	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KF122K3-	600	.0012	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KF152K3-	600	.0015	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KF182K3-	600	.0018	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KF222K3-	600	.0022	M, P, R, S	0.750	0.235	0.688	0.235
CQR39A-KF272K3-	600	.0027	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KF332K3-	600	.0033	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KF392K3-	600	.0039	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KF472K3-	600	.0047	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KF562K3-	600	.0056	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KF682K3-	600	.0068	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KF822K3-	600	.0082	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KF103K3-	600	.010	M, P, R, S	0.875	0.312	0.812	0.312
CQR39A-KF123K3-	600	.012	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KF153K3-	600	.015	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KF183K3-	600	.018	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KF223K3-	600	.022	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KF273K3-	600	.027	M, P, R, S	1.125	0.400	1.062	0.400
CQR39A-KF333K3-	600	.033	M, P, R, S	1.125	0.400	1.062	0.400
CQR39A-KF393K3-	600	.039	M, P, R, S	1.375	0.400	1.312	0.400
CQR39A-KF473K3-	600	.047	M, P, R, S	1.375	0.400	1.312	0.400
CQR39A-KF563K3-	600	.056	M, P, R, S	1.125	0.562	1.062	0.562
CQR39A-KF683K3-	600	.068	M, P, R, S	1.125	0.562	1.062	0.562
CQR39A-KF823K3-	600	.082	M, P, R, S	1.375	0.562	1.312	0.562
CQR39A-KF104K3-	600	.10	M, P, R, S	1.375	0.562	1.312	0.562
CQR39A-KF124K3-	600	.12	M, P, R, S	1.625	0.562	1.562	0.562
CQR39A-KF154K3-	600	.15	M, P, R, S	1.625	0.562	1.562	0.562

See footnotes at end of table.

TABLE I. Styles CQR39 capacitors - Continued.

Part or Identifying Number (PIN) <u>1/</u>	DC voltage rating (volts)	Capacitance ( $\mu$ F)	Failure rate level	Case dimensions (inches) <u>2/ 3/</u>			
				Circuit 1		Circuit 3	
				L ± .031	D+.015 -.005	L ± .031	D+.015 -.005
CQR39A-KF184K3-	600	.18	M, P, R, S	1.625	0.670	1.562	0.670
CQR39A-KF224K3-	600	.22	M, P, R, S	1.625	0.670	1.562	0.670
CQR39A-KF274K3-	600	.27	M, P, R, S	2.125	0.750	2.062	0.750
CQR39A-KF334K3-	600	.33	M, P, R, S	2.125	0.750	2.062	0.750
CQR39A-KF394K3-	600	.39	M, P, R, S	2.375	0.750	2.312	0.750
CQR39A-KF474K3-	600	.47	M, P, R, S	2.375	0.750	2.312	0.750
CQR39A-KG102K3-	1000	.0010	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KG122K3-	1000	.0012	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KG152K3-	1000	.0015	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KG182K3-	1000	.0018	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KG222K3-	1000	.0022	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KG272K3-	1000	.0027	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KG332K3-	1000	.0033	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KG392K3-	1000	.0039	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KG472K3-	1000	.0047	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KG562K3-	1000	.0056	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KG682K3-	1000	.0068	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KG822K3-	1000	.0082	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KG103K3-	1000	.010	M, P, R, S	0.875	0.400	0.812	0.400
CQR39A-KG123K3-	1000	.012	M, P, R, S	1.125	0.400	1.062	0.400
CQR39A-KG153K3-	1000	.015	M, P, R, S	1.125	0.400	1.062	0.400
CQR39A-KG183K3-	1000	.018	M, P, R, S	1.375	0.400	1.312	0.400
CQR39A-KG223K3-	1000	.022	M, P, R, S	1.375	0.400	1.312	0.400
CQR39A-KG273K3-	1000	.027	M, P, R, S	1.125	0.562	1.062	0.562
CQR39A-KG333K3-	1000	.033	M, P, R, S	1.125	0.562	1.062	0.562
CQR39A-KG393K3-	1000	.039	M, P, R, S	1.375	0.562	1.312	0.562
CQR39A-KG473K3-	1000	.047	M, P, R, S	1.375	0.562	1.312	0.562
CQR39A-KG563K3-	1000	.056	M, P, R, S	1.625	0.562	1.562	0.562
CQR39A-KG683K3-	1000	.068	M, P, R, S	1.625	0.562	1.562	0.562
CQR39A-KG823K3-	1000	.082	M, P, R, S	1.625	0.670	1.562	0.670
CQR39A-KG104K3-	1000	.10	M, P, R, S	1.625	0.670	1.562	0.670
CQR39A-KG124K3-	1000	.12	M, P, R, S	1.875	0.670	1.812	0.670
CQR39A-KG154K3-	1000	.15	M, P, R, S	1.875	0.670	1.812	0.670
CQR39A-KG184K3-	1000	.18	M, P, R, S	2.125	0.750	2.062	0.750
CQR39A-KG224K3-	1000	.22	M, P, R, S	2.125	0.750	2.062	0.750
CQR39A-KG274K3-	1000	.27	M, P, R, S	2.125	1.000	2.062	1.000
CQR39A-KG334K3-	1000	.33	M, P, R, S	2.125	1.000	2.062	1.000
CQR39A-KG394K3-	1000	.39	M, P, R, S	2.375	1.000	2.312	1.000
CQR39A-KG474K3-	1000	.47	M, P, R, S	2.375	1.000	2.312	1.000

- 1/ Complete part number shall include additional symbols to indicate circuit symbol and failure rate level, as applicable.  
2/ Dimensions are for basic case; sleeving shall extend 0.016 inch minimum, 0.062 inch maximum, beyond each end of the capacitor body; however, if a shrink-fitted insulation is used for the sleeving, it shall lap over the ends of the capacitor body. Add 0.047 inch maximum to the nominal for capacitor diameter.  
3/ See table II for metric equivalents.

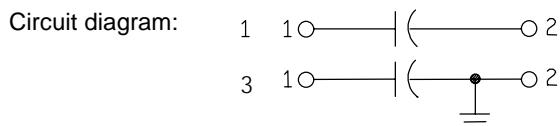
TABLE II. Millimeter equivalent of decimal inches.

Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
0.005	0.13	0.235	5.97	0.750	19.05	1.312	33.32	2.062	52.37
0.015	0.38	0.312	7.92	0.812	20.62	1.375	34.93	2.125	53.98
0.016	0.41	0.400	10.16	0.875	22.23	1.562	39.67	2.312	58.72
0.031	0.79	0.562	14.27	1.000	25.40	1.625	41.28	2.375	60.33
0.047	1.19	0.670	17.02	1.062	26.97	1.812	46.02		
0.062	1.57	0.688	17.48	1.125	28.58	1.875	47.63		

Case material: Nonmagnetic (end seal may be of magnetic material).

Dielectric material: Paper and polyethelene terephthalate (K).

Terminals: Axial-wire lead (see figure 1).



Rated voltage: See table I.

Rated temperature: -65° to +125°C.

Capacitance (nominal): See table I.

Capacitance tolerance: ±10 percent (symbol K).

Dissipation factor (DF) (max): 1.0 percent.

Failure rate level: M, P, R or S in accordance with MIL-PRF-19978.

Burn-in: In accordance with MIL-PRF-19978.

Radiographic inspection: In accordance with MIL-PRF-19978.

Seal: Method 112 of MIL-STD-202, test condition letter A.

Dielectric withstand voltage (DWV):

Sleeving: In accordance with MIL-PRF-19978.

Barometric pressure, qualification only: In accordance with MIL-PRF-19978.

Test points:

Circuit diagram 1: Between terminals and case.

Circuit diagram 3: Between ungrounded terminal and case.

Insulation resistance (IR):

Sleeving: In accordance with MIL-PRF-19978.

Terminal to terminal: See table III.

TABLE III. Terminal-to-terminal insulation resistance.

Capacitance rating	Minimum insulation resistance
0 to 0.6 microfarad	<u>At 25°C</u> 25,000 megohms
Greater than 0.6 microfarad	15,000 megohm-microfarads <u>1/</u>
0 to 0.08 microfarad	<u>At 125°C</u> 250 megohms
Greater than 0.08 microfarad	20 megohm-microfarads <u>1/</u>

1/ Product obtained by multiplying the capacitance in microfarads by the insulation resistance in megohms.

Terminal to case: Greater than 10,000 megohms.

Vibration, high frequency: Method 204 of MIL-STD-202, test condition B, with the following exception:

Direction and duration of motion: 4 hours in each of two mutually perpendicular directions (total of 8 hours), one parallel and the other perpendicular to the cylindrical axis.

Salt spray: In accordance with MIL-PRF-19978.

Immersion:

DWV:

Sleeving: In accordance with MIL-PRF-19978.

IR:

Sleeving: In accordance with MIL-PRF-19978.

Solderability: In accordance with MIL-PRF-19978.

Terminal strength: Method 211 of MIL-STD-202, test condition letter D.

Moisture resistance:

DWV:

Sleeving: In accordance with MIL-PRF-19978.

IR:

Sleeving: In accordance with MIL-PRF-19978.

Stability at low and high temperature:

Low temperature:

Test temperature: -65°C +0°, -5°C.

Capacitance change (max): -10 percent.

High temperature:

Test temperature: +125°C +5°, -0°C.

Capacitance change (max): +10 percent.

Life:

Capacitance change (max): ±5 percent.

Resistance to soldering heat: In accordance with MIL-PRF-19978.

TABLE IV. Substitutability data. 1/

From	To	From	To
MIL-C-25/1K (CP08 and CP09)	MIL-C-19978/16 (CQR39)	MIL-C-25/1K (CP08 and CP09)	MIL-C-19978/16 (CQR39)
CP--A-KB822K-	CQR39A-KB822K3-	CP--A-KC224K-	CQR39A-KC224K3-
CP--A-KB103K-	CQR39A-KB103K3-	CP--A-KC274K-	CQR39A-KC274K3-
CP--A-KB123K-	CQR39A-KB123K3-	CP--A-KC334K-	CQR39A-KC334K3-
CP--A-KB153K-	CQR39A-KB153K3-	CP--A-KC394K-	CQR39A-KC394K3-
CP--A-KB393K-	CQR39A-KB393K3-	CP--A-KC474K-	CQR39A-KC474K3-
CP--A-KB473K-	CQR39A-KB473K3-	CP--A-KC564K-	CQR39A-KC564K3-
CP--A-KB823K-	CQR39A-KB823K3-	CP--A-KC684K-	CQR39A-KC684K3-
CP--A-KB104K-	CQR39A-KB104K3-	CP--A-KC824K-	CQR39A-KC824K3-
CP--A-KB124K-	CQR39A-KB124K3-	CP--A-KC105K-	CQR39A-KC105K3-
CP--A-KB154K-	CQR39A-KB154K3-	CP--A-KE272K-	CQR39A-KE272K3-
CP--A-KB184K-	CQR39A-KB184K3-	CP--A-KE332K-	CQR39A-KE332K3-
CP--A-KB224K-	CQR39A-KB224K3-	CP--A-KE123K-	CQR39A-KE123K3-
CP--A-KB274K-	CQR39A-KB274K3-	CP--A-KE153K-	CQR39A-KE153K3-
CP--A-KB334K-	CQR39A-KB334K3-	CP--A-KE273K-	CQR39A-KE273K3-
CP--A-KB394K-	CQR39A-KB394K3-	CP--A-KE333K-	CQR39A-KE333K3-
CP--A-KB474K-	CQR39A-KB474K3-	CP--A-KE393K-	CQR39A-KE393K3-
CP--A-KB564K-	CQR39A-KB564K3-	CP--A-KE473K-	CQR39A-KE473K3-
CP--A-KB684K-	CQR39A-KB684K3-	CP--A-KE563K-	CQR39A-KE563K3-
CP--A-KB824K-	CQR39A-KB824K3-	CP--A-KE683K-	CQR39A-KE683K3-
CP--A-KB105K-	CQR39A-KB105K3-	CP--A-KE823K-	CQR39A-KE823K3-
CP--A-KC392K-	CQR39A-KC392K3-	CP--A-KE104K-	CQR39A-KE104K3-
CP--A-KC472K-	CQR39A-KC472K3-	CP--A-KE124K-	CQR39A-KE124K3-
CP--A-KC562K-	CQR39A-KC562K3-	CP--A-KE154K-	CQR39A-KE154K3-
CP--A-KC682K-	CQR39A-KC682K3-	CP--A-KE184K-	CQR39A-KE184K3-
CP--A-KC183K-	CQR39A-KC183K3-	CP--A-KE224K-	CQR39A-KE224K3-
CP--A-KC223K-	CQR39A-KC223K3-	CP--A-KE274K-	CQR39A-KE274K3-
CP--A-KC273K-	CQR39A-KC273K3-	CP--A-KE334K-	CQR39A-KE334K3-
CP--A-KC333K-	CQR39A-KC333K3-	CP--A-KE394K-	CQR39A-KE394K3-
CP--A-KC393K-	CQR39A-KC393K3-	CP--A-KE474K-	CQR39A-KE474K3-
CP--A-KC473K-	CQR39A-KC473K3-	CP--A-KF102K-	CQR39A-KF102K3-
CP--A-KC563K-	CQR39A-KC563K3-	CP--A-KF122K-	CQR39A-KF122K3-
CP--A-KC683K-	CQR39A-KC683K3-	CP--A-KF152K-	CQR39A-KF152K3-
CP--A-KC823K-	CQR39A-KC823K3-	CP--A-KF182K-	CQR39A-KF182K3-
CP--A-KC104K-	CQR39A-KC104K3-	CP--A-KF222K-	CQR39A-KF222K3-
CP--A-KC124K-	CQR39A-KC124K3-	CP--A-KF272K-	CQR39A-KF272K3-
CP--A-KC154K-	CQR39A-KC154K3-	CP--A-KF332K-	CQR39A-KF332K3-

See footnote at end of table.

TABLE IV. Substitutability data - Continued. 1/

From	To	From	To
MIL-C-25/1K (CP08 and CP09)	MIL-C-19978/16 (CQR39)	MIL-C-25/1K (CP08 and CP09)	MIL-C-19978/16 (CQR39)
CP--A-KC184K-	CQR39A-KC184K3-	CP--A-KF392K-	CQR39A-KF392K3-
CP--A-KF472K-	CQR39A-KF472K3-	CP--A-KG222K-	CQR39A-KG222K3-
CP--A-KF562K-	CQR39A-KF562K3-	CP--A-KG272K-	CQR39A-KG272K3-
CP--A-KF682K-	CQR39A-KF682K3-	CP--A-KG332K-	CQR39A-KG332K3-
CP--A-KF822K-	CQR39A-KF822K3-	CP--A-KG392K-	CQR39A-KG392K3-
CP--A-KF103K-	CQR39A-KF103K3-	CP--A-KG472K-	CQR39A-KG472K3-
CP--A-KF123K-	CQR39A-KF123K3-	CP--A-KG562K-	CQR39A-KG562K3-
CP--A-KF153K-	CQR39A-KF153K3-	CP--A-KG682K-	CQR39A-KG682K3-
CP--A-KF183K-	CQR39A-KF183K3-	CP--A-KG822K-	CQR39A-KG822K3-
CP--A-KF223K-	CQR39A-KF223K3-	CP--A-KG103K-	CQR39A-KG103K3-
CP--A-KF273K-	CQR39A-KF273K3-	CP--A-KG123K-	CQR39A-KG123K3-
CP--A-KF333K-	CQR39A-KF333K3-	CP--A-KG153K-	CQR39A-KG153K3-
CP--A-KF393K-	CQR39A-KF393K3-	CP--A-KG183K-	CQR39A-KG183K3-
CP--A-KF473K-	CQR39A-KF473K3-	CP--A-KG223K-	CQR39A-KG223K3-
CP--A-KF563K-	CQR39A-KF563K3-	CP--A-KG273K-	CQR39A-KG273K3-
CP--A-KF683K-	CQR39A-KF683K3-	CP--A-KG333K-	CQR39A-KG333K3-
CP--A-KF823K-	CQR39A-KF823K3-	CP--A-KG393K-	CQR39A-KG393K3-
CP--A-KF104K-	CQR39A-KF104K3-	CP--A-KG473K-	CQR39A-KG473K3-
CP--A-KF124K-	CQR39A-KF124K3-	CP--A-KG563K-	CQR39A-KG563K3-
CP--A-KF154K-	CQR39A-KF154K3-	CP--A-KG683K-	CQR39A-KG683K3-
CP--A-KF184K-	CQR39A-KF184K3-	CP--A-KG823K-	CQR39A-KG823K3-
CP--A-KF224K-	CQR39A-KF224K3-	CP--A-KG104K-	CQR39A-KG104K3-
CP--A-KF274K-	CQR39A-KF274K3-	CP--A-KG124K-	CQR39A-KG124K3-
CP--A-KF334K-	CQR39A-KF334K3-	CP--A-KG154K-	CQR39A-KG154K3-
CP--A-KF394K-	CQR39A-KF394K3-	CP--A-KG184K-	CQR39A-KG184K3-
CP--A-KF474K-	CQR39A-KF474K3-	CP--A-KG224K-	CQR39A-KG224K3-
CP--A-KG102K-	CQR39A-KG102K3-	CP--A-KG274K-	CQR39A-KG274K3-
CP--A-KG122K-	CQR39A-KG122K3-	CP--A-KG334K-	CQR39A-KG334K3-
CP--A-KG152K-	CQR39A-KG152K3-	CP--A-KG394K-	CQR39A-KG394K3-
CP--A-KG182K-	CQR39A-KG182K3-	CP--A-KG474K-	CQR39A-KG474K3-

1/ NOTE: Style CQR39 capacitors are substitutable for styles CP08 and CP09 capacitors formerly covered in MIL-C-25/1K.

## Custodians:

Army - CR  
Navy - EC  
Air Force - 11  
DLA - CC

Preparing activity:  
DLA - CC

(Project 5910-2118-02)

## Review activities:

Army - AR, AT, AV, MI  
Navy - AS, MC, OS, SH