INCH-POUND

MIL-PRF-55514/7B
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SUPERSEDING
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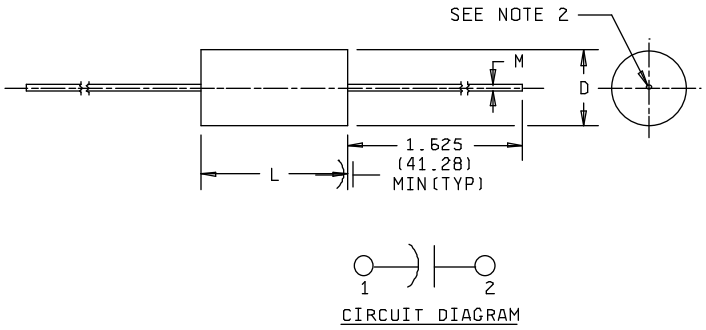
PERFORMANCE SPECIFICATION SHEET

CAPACITORS, FIXED, METALIZED PLASTIC DIELECTRIC, DC-AC, IN NONMETAL CASES, ESTABLISHED RELIABILITY, STYLE CFR09

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-55514.



NOTES:
1. Dimensions are in inches.
2. Leads shall be of solid wire and located on centerline within ± .062 (1.57 mm) but not less than .03 (0.8 mm) from edge of capacitor.
3. Millimeters are in parentheses.
4. Metric equivalents are given for general information only and are based upon 1 inch = 25.4 mm.
5. Lead length may be a minimum of 1-inch long for use in tape and reel packaging when specified in the ordering data.

FIGURE 1. Style CF09 capacitors

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

TABLE I. Capacitor characteristics.

50 VDC								
Type designation 1/	Capacitance (nom) µF	Capacitance tolerance available	Dimensions (in inches)			AC ratings (for sinusoidal operation from -55°C to +105°C) 3/		
			D ± .050 (1.27)	L ± .050 (1.27)	M 2/	RMS current Amperes	RMS voltage - Volts 0-400 Hz	RMS voltage - Volts 4 kHz
CFR09ARA563--	.056	F,G,J,K	.170 (4.32)	.400 (10.16)	.020 (0.51)	.180	25.0	25.0
CFR09ARA683--	.068	F,G,J,K	.170 (4.32)	.400 (10.16)	.020 (0.51)	.220	25.0	25.0
CFR09ARA823--	.082	F,G,J,K	.190 (4.83)	.400 (10.16)	.020 (0.51)	.264	25.0	25.0
CFR09ARA104--	.10	F,G,J,K	.230 (5.84)	.400 (10.16)	.025 (0.64)	.364	25.0	25.0
CFR09ARA124--	.12	F,G,J,K	.230 (5.84)	.400 (10.16)	.025 (0.64)	.388	25.0	25.0
CFR09ARA154--	.15	F,G,J,K	.230 (5.84)	.400 (10.16)	.025 (0.64)	.488	25.0	25.0
CFR09ARA184--	.18	F,G,J,K	.260 (6.60)	.400 (10.16)	.025 (0.64)	.584	25.0	25.0
CFR09ARA224--	.22	F,G,J,K	.260 (6.60)	.400 (10.16)	.025 (0.64)	.712	25.0	25.0
CFR09ARA274--	.27	F,G,J,K	.230 (5.84)	.530 (13.46)	.025 (0.64)	.376	25.0	24.0
CFR09ARA334--	.33	F,G,J,K	.260 (6.60)	.530 (13.46)	.025 (0.64)	.460	25.0	22.0
CFR09ARA394--	.39	F,G,J,K	.260 (6.60)	.530 (13.46)	.025 (0.64)	.540	25.0	21.5
CFR09ARA474--	.47	F,G,J,K	.310 (7.87)	.530 (13.46)	.025 (0.64)	.652	25.0	20.0
CFR09ARA564--	.56	F,G,J,K	.310 (7.87)	.530 (13.46)	.025 (0.64)	.780	25.0	19.0
CFR09ARA684--	.68	F,G,J,K	.350 (8.89)	.530 (13.46)	.025 (0.64)	1.434	25.0	18.0
CFR09ARA824--	.82	F,G,J,K	.350 (8.89)	.530 (13.46)	.025 (0.64)	1.710	25.0	17.0
CFR09ARA105--	1.0	F,G,J,K	.310 (7.87)	.750 (19.05)	.025 (0.64)	.884	25.0	15.0
CFR09ARA125--	1.2	F,G,J,K	.310 (7.87)	.750 (19.05)	.025 (0.64)	1.060	25.0	14.5
CFR09ARA155--	1.5	F,G,J,K	.350 (8.89)	.750 (19.05)	.025 (0.64)	2.004	25.0	13.0
CFR09ARA185--	1.8	F,G,J,K	.400 (10.16)	.750 (19.05)	.025 (0.64)	2.388	25.0	12.0
CFR09ARA205--	2.0	F,G,J,K	.400 (10.16)	.750 (19.05)	.025 (0.64)	2.652	25.0	11.5
CFR09ARA225--	2.2	F,G,J,K	.400 (10.16)	.750 (19.05)	.025 (0.64)	2.484	25.0	11.0
CFR09ARA275--	2.7	F,G,J,K	.350 (8.89)	1.030 (26.16)	.025 (0.64)	2.076	25.0	10.5
CFR09ARA305--	3.0	F,G,J,K	.400 (10.16)	1.030 (26.16)	.025 (0.64)	2.305	25.0	10.0
CFR09ARA335--	3.3	F,G,J,K	.400 (10.16)	1.030 (26.16)	.025 (0.64)	2.550	25.0	9.5
CFR09ARA395--	3.9	F,G,J,K	.440 (11.18)	1.030 (26.16)	.032 (0.81)	2.994	25.0	8.5
CFR09ARA475--	4.7	F,G,J,K	.440 (11.18)	1.030 (26.16)	.032 (0.81)	3.264	25.0	8.0
CFR09ARA505--	5.0	F,G,J,K	.490 (12.45)	1.030 (26.16)	.032 (0.81)	3.834	25.0	7.5
CFR09ARA565--	5.6	F,G,J,K	.490 (12.45)	1.030 (26.16)	.032 (0.81)	4.000	25.0	7.0
CFR09ARA685--	6.8	F,G,J,K	.490 (12.45)	1.250 (31.75)	.032 (0.81)	4.000	25.0	6.5
CFR09ARA825--	8.2	F,G,J,K	.560 (14.22)	1.250 (31.75)	.032 (0.81)	4.000	25.0	5.5
CFR09ARA106--	10.0	F,G,J,K	.610 (15.49)	1.250 (31.75)	.032 (0.81)	4.000	25.0	5.0
CFR09ARA126--	12.0	F,G,J,K	.610 (15.49)	1.500 (38.10)	.032 (0.81)	4.000	25.0	4.5
CFR09ARA156--	15.0	F,G,J,K	.610 (15.49)	1.500 (38.10)	.032 (0.81)	4.000	25.0	4.0
CFR09ARA186--	18.0	F,G,J,K	.670 (17.02)	1.500 (38.10)	.032 (0.81)	4.000	25.0	3.5

See footnotes at end of table.

TABLE 1. Capacitor characteristics - Continued.

75 VDC								
Type designation 1/	Capacitance (nom) µF	Capacitance tolerance available	Dimensions (in inches)			AC ratings (for sinusoidal operation from -55°C to +105°C) 3/		
			D ± .050 (1.27)	L ± .050 (1.27)	M 2/	RMS current Amperes	RMS voltage - Volts 0-400 Hz	RMS voltage - Volts 4 Hz
CFR09ARG333--	.033	F,G,J,K	.170 (4.32)	.400 (10.16)	.020 (0.51)	.140	39.0	39.0
CFR09ARG393--	.039	F,G,J,K	.170 (4.32)	.400 (10.16)	.020 (0.51)	.168	39.0	39.0
CFR09ARG473--	.047	F,G,J,K	.190 (4.83)	.400 (10.16)	.020 (0.51)	.200	39.0	39.0
CFR09ARG563--	.056	F,G,J,K	.190 (4.83)	.400 (10.16)	.020 (0.51)	.240	39.0	39.0
CFR09ARG683--	.068	F,G,J,K	.230 (5.84)	.400 (10.16)	.025 (0.64)	.288	39.0	39.0
CFR09ARG823--	.082	F,G,J,K	.230 (5.84)	.400 (10.16)	.025 (0.64)	.384	39.0	39.0
CFR09ARG104--	.10	F,G,J,K	.260 (6.60)	.400 (10.16)	.025 (0.64)	.424	39.0	37.0
CFR09ARG124--	.12	F,G,J,K	.260 (6.60)	.400 (10.16)	.025 (0.64)	.512	39.0	35.0
CFR09ARG154--	.15	F,G,J,K	.230 (5.84)	.530 (13.46)	.025 (0.64)	.276	39.0	33.0
CFR09ARG184--	.18	F,G,J,K	.230 (5.84)	.530 (13.46)	.025 (0.64)	.328	39.0	31.0
CFR09ARG224--	.22	F,G,J,K	.260 (6.60)	.530 (13.46)	.025 (0.64)	.404	39.0	29.0
CFR09ARG274--	.27	F,G,J,K	.260 (6.60)	.530 (13.46)	.025 (0.64)	.496	39.0	27.0
CFR09ARG334--	.33	F,G,J,K	.310 (7.87)	.530 (13.46)	.025 (0.64)	.604	39.0	25.0
CFR09ARG394--	.39	F,G,J,K	.310 (7.87)	.530 (13.46)	.025 (0.64)	.716	39.0	24.0
CFR09ARG474--	.47	F,G,J,K	.350 (8.89)	.530 (13.46)	.025 (0.64)	1.290	39.0	22.5
CFR09ARG564--	.56	F,G,J,K	.310 (7.87)	.750 (19.05)	.025 (0.64)	.652	39.0	21.0
CFR09ARG684--	.68	F,G,J,K	.310 (7.87)	.750 (19.05)	.025 (0.64)	.792	39.0	19.0
CFR09ARG824--	.82	F,G,J,K	.350 (8.89)	.750 (19.05)	.025 (0.64)	1.212	39.0	17.5
CFR09ARG105--	1.0	F,G,J,K	.350 (8.89)	.750 (19.05)	.025 (0.64)	1.434	39.0	16.0
CFR09ARG125--	1.2	F,G,J,K	.400 (10.16)	.750 (19.05)	.025 (0.64)	1.770	39.0	15.0
CFR09ARG155--	1.5	F,G,J,K	.350 (8.89)	1.030 (26.16)	.025 (0.64)	1.374	39.0	14.0
CFR09ARG185--	1.8	F,G,J,K	.400 (10.16)	1.030 (26.16)	.025 (0.64)	1.818	39.0	13.0
CFR09ARG205--	2.0	F,G,J,K	.400 (10.16)	1.030 (26.16)	.025 (0.64)	1.830	39.0	12.5
CFR09ARG225--	2.2	F,G,J,K	.400 (10.16)	1.030 (26.16)	.025 (0.64)	2.010	39.0	12.0
CFR09ARG275--	2.7	F,G,J,K	.440 (11.18)	1.030 (26.16)	.032 (0.81)	2.466	39.0	11.5
CFR09ARG305--	3.0	F,G,J,K	.490 (12.45)	1.030 (26.16)	.032 (0.81)	2.742	39.0	11.0
CFR09ARG335--	3.3	F,G,J,K	.490 (12.45)	1.030 (26.16)	.032 (0.81)	3.018	39.0	10.5
CFR09ARG395--	3.9	F,G,J,K	.560 (14.22)	1.030 (26.16)	.032 (0.81)	3.942	39.0	10.0
CFR09ARG475--	4.7	F,G,J,K	.560 (14.22)	1.030 (26.16)	.032 (0.81)	4.000	39.0	9.0
CFR09ARG505--	5.0	F,G,J,K	.560 (14.22)	1.250 (31.75)	.032 (0.81)	3.558	39.0	8.5
CFR09ARG565--	5.6	F,G,J,K	.560 (14.22)	1.250 (31.75)	.032 (0.81)	3.984	39.0	8.0
CFR09ARG685--	6.8	F,G,J,K	.610 (15.49)	1.250 (31.75)	.032 (0.81)	4.000	39.0	7.0
CFR09ARG825--	8.2	F,G,J,K	.670 (17.02)	1.250 (31.75)	.032 (0.81)	4.000	39.0	6.5
CFR09ARG106--	10.0	F,G,J,K	.670 (17.02)	1.500 (38.10)	.032 (0.81)	4.000	39.0	5.5
CFR09ARG126--	12.0	F,G,J,K	.740 (18.80)	1.500 (38.10)	.032 (0.81)	4.000	39.0	4.5
CFR09ARG156--	15.0	F,G,J,K	.740 (18.80)	1.500 (38.10)	.032 (0.81)	4.000	37.0	3.5

See footnotes at end of table.

TABLE 1. Capacitor characteristics - Continued.

100 VDC								
Type designation 1/	Capacitance (nom) µF	Capacitance tolerance available	Dimensions (in inches)			AC ratings (for sinusoidal operation from -55°C to +105°C) 3/		
			D ± .050 (1.27)	L ± .050 (1.27)	M 2/	RMS current Amperes	RMS voltage - Volts 0-400 Hz	RMS voltage - Volts 4 kHz
CFR09ARB273--	.027	F,G,J,K	.170 (4.32)	.400 (10.16)	.020 (0.51)	.128	53.0	53.0
CFR09ARB333--	.033	F,G,J,K	.190 (4.83)	.400 (10.16)	.020 (0.51)	.168	53.0	53.0
CFR09ARB393--	.039	F,G,J,K	.190 (4.83)	.400 (10.16)	.020 (0.51)	.200	53.0	53.0
CFR09ARB473--	.047	F,G,J,K	.230 (5.84)	.400 (10.16)	.025 (0.64)	.240	53.0	53.0
CFR09ARB563--	.056	F,G,J,K	.230 (5.84)	.400 (10.16)	.025 (0.64)	.288	53.0	53.0
CFR09ARB683--	.068	F,G,J,K	.260 (6.60)	.400 (10.16)	.025 (0.64)	.348	53.0	52.0
CFR09ARB823--	.082	F,G,J,K	.260 (6.60)	.400 (10.16)	.025 (0.64)	.420	53.0	49.0
CFR09ARB104--	.10	F,G,J,K	.230 (5.84)	.530 (13.46)	.025 (0.64)	.308	53.0	46.0
CFR09ARB124--	.12	F,G,J,K	.230 (5.84)	.530 (13.46)	.025 (0.64)	.300	53.0	44.0
CFR09ARB154--	.15	F,G,J,K	.260 (6.60)	.530 (13.46)	.025 (0.64)	.460	53.0	41.0
CFR09ARB184--	.18	F,G,J,K	.260 (6.60)	.530 (13.46)	.025 (0.64)	.396	53.0	38.0
CFR09ARB224--	.22	F,G,J,K	.310 (7.87)	.530 (13.46)	.025 (0.64)	.484	53.0	35.0
CFR09ARB274--	.27	F,G,J,K	.310 (7.87)	.530 (13.46)	.025 (0.64)	.592	53.0	33.0
CFR09ARB334--	.33	F,G,J,K	.350 (8.89)	.530 (13.46)	.025 (0.64)	1.086	53.0	30.0
CFR09ARB394--	.39	F,G,J,K	.310 (7.87)	.750 (19.05)	.025 (0.64)	.544	53.0	28.0
CFR09ARB474--	.47	F,G,J,K	.310 (7.87)	.750 (19.05)	.025 (0.64)	.666	53.0	26.0
CFR09ARB564--	.56	F,G,J,K	.350 (8.89)	.750 (19.05)	.025 (0.64)	1.170	53.0	24.0
CFR09ARB684--	.68	F,G,J,K	.350 (8.89)	.750 (19.05)	.025 (0.64)	1.422	53.0	22.0
CFR09ARB824--	.82	F,G,J,K	.400 (10.16)	.750 (19.05)	.025 (0.64)	1.716	53.0	20.0
CFR09ARB105--	1.0	F,G,J,K	400 (10.16)	.750 (19.05)	.025 (0.64)	1.770	53.0	18.5
CFR09ARB125--	1.2	F,G,J,K	.350 (8.89)	1.030 (26.16)	.025 (0.64)	1.314	53.0	17.0
CFR09ARB155--	1.5	F,G,J,K	400 (10.16)	1.030 (26.16)	.025 (0.64)	1.818	53.0	15.0
CFR09ARB185--	1.8	F,G,J,K	.440 (11.18)	1.030 (26.16)	.032 (0.81)	2.184	53.0	13.5
CFR09ARB205--	2.0	F,G,J,K	.440 (11.18)	1.030 (26.16)	.032 (0.81)	2.430	53.0	12.5
CFR09ARB225--	2.2	F,G,J,K	.490 (12.45)	1.030 (26.16)	.032 (0.81)	2.670	53.0	12.0
CFR09ARB275--	2.7	F,G,J,K	.490 (12.45)	1.030 (26.16)	.032 (0.81)	2.964	53.0	10.5
CFR09ARB305--	3.0	F,G,J,K	.490 (12.45)	1.250 (31.75)	.032 (0.81)	2.562	53.0	10.0
CFR09ARB335--	3.3	F,G,J,K	.490 (12.45)	1.250 (31.75)	.032 (0.81)	2.820	53.0	9.5
CFR09ARB395--	3.0	F,G,J,K	.560 (14.22)	1.250 (31.75)	.032 (0.81)	3.330	53.0	8.5
CFR09ARB475--	4.7	F,G,J,K	.610 (15.49)	1.250 (31.75)	.032 (0.81)	4.000	53.0	7.5
CFR09ARB505--	5.0	F,G,J,K	.610 (15.49)	1.250 (31.75)	.032 (0.81)	4.000	53.0	7.0
CFR09ARB565--	5.6	F,G,J,K	.560 (14.22)	1.500 (38.10)	.032 (0.81)	3.684	53.0	6.5
CFR09ARB685--	6.8	F,G,J,K	.610 (15.49)	1.500 (38.10)	.032 (0.81)	4.000	51.0	6.0
CFR09ARB825--	8.2	F,G,J,K	.670 (17.02)	1.500 (38.10)	.032 (0.81)	4.000	48.0	5.5
CFR09ARB106--	10.0	F,G,J,K	.740 (18.80)	1.500 (38.10)	.032 (0.81)	4.000	46.0	4.0

See notes at end of table.

TABLE 1. Capacitor characteristics - Continued.

150 VDC								
Type designation 1/	Capacitance (nom) µF	Capacitance tolerance available	Dimensions (in inches)			AC ratings (for sinusoidal operation from -55°C to +105°C) 3/		
			D ± .050 (1.27)	L ± .050 (1.27)	M 2/	RMS current Amperes	RMS voltage - Volts 0-400 Hz	RMS voltage - Volts 4 kHz
CFR09ARH153--	.015	F,G,J,K	.170 (4.32)	.400 (10.16)	.020 (0.51)	.108	79.0	79.0
CFR09ARH183--	.018	F,G,J,K	.190 (4.83)	.400 (10.16)	.020 (0.51)	.128	79.0	79.0
CFR09ARH223--	.022	F,G,J,K	.230 (5.84)	.400 (10.16)	.025 (0.64)	.160	79.0	79.0
CFR09ARH273--	.027	F,G,J,K	.230 (5.84)	.400 (10.16)	.025 (0.64)	.196	79.0	79.0
CFR09ARH333--	.033	F,G,J,K	.230 (5.84)	.400 (10.16)	.025 (0.64)	.240	79.0	75.0
CFR09ARH393--	.039	F,G,J,K	.260 (6.60)	.400 (10.16)	.025 (0.64)	.284	79.0	71.0
CFR09ARH473--	.047	F,G,J,K	.260 (6.60)	.400 (10.16)	.025 (0.64)	.340	79.0	68.0
CFR09ARH563--	.056	F,G,J,K	.230 (5.84)	.530 (13.46)	.025 (0.64)	.176	79.0	65.0
CFR09ARH683--	.068	F,G,J,K	.230 (5.84)	.530 (13.46)	.025 (0.64)	.212	79.0	61.0
CFR09ARH823--	.082	F,G,J,K	.260 (6.60)	.530 (13.46)	.025 (0.64)	.252	79.0	58.0
CFR09ARH104--	.10	F,G,J,K	.260 (6.60)	.530 (13.46)	.025 (0.64)	.312	79.0	55.0
CFR09ARH124--	.12	F,G,J,K	.310 (7.87)	.530 (13.46)	.025 (0.64)	.372	79.0	51.0
CFR09ARH154--	.15	F,G,J,K	.350 (8.89)	.530 (13.46)	.025 (0.64)	.702	79.0	48.0
CFR09ARH184--	.18	F,G,J,K	.350 (8.89)	.530 (13.46)	.025 (0.64)	.840	79.0	45.0
CFR09ARH224--	.22	F,G,J,K	.310 (7.87)	.750 (19.05)	.025 (0.64)	.436	79.0	42.0
CFR09ARH274--	.27	F,G,J,K	.310 (7.87)	.750 (19.05)	.025 (0.64)	.536	79.0	39.0
CFR09ARH334--	.33	F,G,J,K	.350 (8.89)	.750 (19.05)	.025 (0.64)	.978	79.0	35.0
CFR09ARH394--	.39	F,G,J,K	.400 (10.16)	.750 (19.05)	.025 (0.64)	1.158	79.0	32.0
CFR09ARH474--	.47	F,G,J,K	.400 (10.16)	.750 (19.05)	.025 (0.64)	1.182	79.0	30.0
CFR09ARH564--	.56	F,G,J,K	.350 (8.89)	1.030 (26.16)	.025 (0.64)	.960	79.0	28.0
CFR09ARH684--	.68	F,G,J,K	.400 (10.16)	1.030 (26.16)	.025 (0.64)	1.170	79.0	26.0
CFR09ARH824--	.82	F,G,J,K	.400 (10.16)	1.030 (26.16)	.025 (0.64)	1.272	79.0	24.0
CFR09ARH105--	1.0	F,G,J,K	.440 (11.18)	1.030 (26.16)	.032 (0.81)	1.554	79.0	22.0
CFR09ARH125--	1.2	F,G,J,K	.490 (12.45)	1.030 (26.16)	.032 (0.81)	2.064	79.0	19.0
CFR09ARH155--	1.5	F,G,J,K	.490 (12.45)	1.250 (31.75)	.032 (0.81)	1.812	79.0	17.0
CFR09ARH185--	1.8	F,G,J,K	.560 (14.22)	1.250 (31.75)	.032 (0.81)	2.178	79.0	15.0
CFR09ARH205--	2.0	F,G,J,K	.560 (14.22)	1.250 (31.75)	.032 (0.81)	2.418	79.0	14.0
CFR09ARH225--	2.2	F,G,J,K	.560 (14.22)	1.250 (31.75)	.032 (0.81)	2.658	79.0	12.5
CFR09ARH275--	2.7	F,G,J,K	.610 (15.49)	1.250 (31.75)	.032 (0.81)	3.264	79.0	11.0
CFR09ARH305--	3.0	F,G,J,K	.610 (15.49)	1.500 (38.10)	.032 (0.81)	2.796	79.0	10.0
CFR09ARH335--	3.3	F,G,J,K	.610 (15.49)	1.500 (38.10)	.032 (0.81)	3.078	79.0	9.0
CFR09ARH395--	3.9	F,G,J,K	.670 (17.02)	1.500 (38.10)	.032 (0.81)	3.636	76.0	8.0
CFR09ARH475--	4.7	F,G,J,K	.740 (18.80)	1.500 (38.10)	.032 (0.81)	4.000	72.0	7.0
CFR09ARH505--	5.0	F,G,J,K	.740 (18.80)	1.500 (38.10)	.032 (0.81)	4.000	71.0	6.0

See footnote at end of table.

TABLE 1. Capacitor characteristics - Continued.

200 VDC								
Type designation 1/	Capacitance (nom) µF	Capacitance tolerance available	Dimensions (in inches)			AC ratings (for sinusoidal operation from -55°C to +105°C) 3/		
			D ± .050 (1.27)	L ± .050 (1.27)	M 2/	RMS current Amperes	RMS voltage - Volts 0-400 Hz	RMS voltage - Volts 4 kHz
CFR09ARC103--	.010	F,G,J,K	.170 (4.32)	.400 (10.16)	.020 (0.51)	.088	106.0	106.0
CFR09ARC123--	.012	F,G,J,K	.190 (4.83)	.400 (10.16)	.020 (0.51)	.104	106.0	103.0
CFR09ARC153--	.015	F,G,J,K	.190 (4.83)	.400 (10.16)	.020 (0.51)	.132	106.0	98.0
CFR09ARC183--	.018	F,G,J,K	.230 (5.84)	.400 (10.16)	.025 (0.64)	.156	106.0	93.0
CFR09ARC223--	.022	F,G,J,K	.230 (5.84)	.400 (10.16)	.025 (0.64)	.192	106.0	89.0
CFR09ARC273--	.027	F,G,J,K	.260 (6.60)	.400 (10.16)	.025 (0.64)	.232	106.0	84.0
CFR09ARC333--	.033	F,G,J,K	.260 (6.60)	.400 (10.16)	.025 (0.64)	.288	106.0	79.0
CFR09ARC393--	.039	F,G,J,K	.230 (5.84)	.530 (13.46)	.025 (0.64)	.144	106.0	75.0
CFR09ARC473--	.047	F,G,J,K	.230 (5.84)	.530 (13.46)	.025 (0.64)	.176	106.0	71.0
CFR09ARC563--	.056	F,G,J,K	.260 (6.60)	.530 (13.46)	.025 (0.64)	.208	106.0	67.0
CFR09ARC683--	.068	F,G,J,K	.260 (6.60)	.530 (13.46)	.025 (0.64)	.252	106.0	63.0
CFR09ARC823--	.082	F,G,J,K	.310 (7.87)	.530 (13.46)	.025 (0.64)	.304	106.0	59.0
CFR09ARC104--	.10	F,G,J,K	.310 (7.87)	.530 (13.46)	.025 (0.64)	.372	106.0	55.0
CFR09ARC124--	.12	F,G,J,K	.350 (8.89)	.530 (13.46)	.025 (0.64)	.672	106.0	51.0
CFR09ARC154--	.15	F,G,J,K	.310 (7.87)	.750 (19.05)	.025 (0.64)	.356	106.0	47.0
CFR09ARC184--	.18	F,G,J,K	.310 (7.87)	.750 (19.05)	.025 (0.64)	.360	106.0	44.0
CFR09ARC224--	.22	F,G,J,K	.350 (8.89)	.750 (19.05)	.025 (0.64)	.786	106.0	40.0
CFR09ARC274--	.27	F,G,J,K	.350 (8.89)	.750 (19.05)	.025 (0.64)	.810	106.0	37.0
CFR09ARC334--	.33	F,G,J,K	.400 (10.16)	.750 (19.05)	.025 (0.64)	.993	106.0	33.0
CFR09ARC394--	.39	F,G,J,K	.350 (8.89)	1.030 (26.16)	.025 (0.64)	.804	106.0	30.0
CFR09ARC474--	.47	F,G,J,K	.400 (10.16)	1.030 (26.16)	.025 (0.64)	.996	106.0	28.0
CFR09ARC564--	.56	F,G,J,K	.400 (10.16)	1.030 (26.16)	.025 (0.64)	1.152	106.0	25.0
CFR09ARC684--	.68	F,G,J,K	.440 (11.18)	1.030 (26.16)	.032 (0.81)	1.404	106.0	23.0
CFR09ARC824--	.82	F,G,J,K	.490 (12.45)	1.030 (26.16)	.032 (0.81)	1.692	106.0	20.0
CFR09ARC105--	1.0	F,G,J,K	.490 (12.45)	1.250 (31.75)	.032 (0.81)	1.452	106.0	18.0
CFR09ARC125--	1.2	F,G,J,K	.490 (12.45)	1.250 (31.75)	.032 (0.81)	1.740	106.0	16.0
CFR09ARC155--	1.5	F,G,J,K	.560 (14.22)	1.250 (31.75)	.032 (0.81)	2.178	105.0	14.0
CFR09ARC185--	1.8	F,G,J,K	.560 (14.22)	1.500 (38.10)	.032 (0.81)	2.010	102.0	12.0
CFR09ARC205--	2.0	F,G,J,K	.560 (14.22)	1.500 (38.10)	.032 (0.81)	2.238	102.0	11.0
CFR09ARC225--	2.2	F,G,J,K	.610 (15.49)	1.500 (38.10)	.032 (0.81)	2.460	99.0	10.5
CFR09ARC275--	2.7	F,G,J,K	.670 (15.49)	1.500 (38.10)	.032 (0.81)	3.024	94.0	10.0
CFR09ARC305--	3.0	F,G,J,K	.670 (15.49)	1.500 (38.10)	.032 (0.81)	3.360	91.0	9.0
CFR09ARC335--	3.3	F,G,J,K	.740 (18.80)	1.500 (38.10)	.032 (0.81)	3.690	89.0	8.0
CFR09ARC395--	3.9	F,G,J,K	.740 (18.80)	1.500 (38.10)	.032 (0.81)	4.000	85.0	7.0

1/ The complete type designation will include additional symbols to indicate capacitance tolerance and product level (C, M, P, R, or S).

2/ Tolerances on lead wire diameters are +.005, -.003 on .032 (No. 20 AWG) and .025 (No. 22 AWG) inch-diameters; and +.004, -.001 on .020 (No. 24 AWG).

3/ These ratings are maximum ac currents and ac voltages. Under no condition should either of these values be exceeded.

REQUIREMENTS:

Design and construction:

Dimensions and configuration: See figure 1 and table I.

Case: Nonhermetic.

Dielectric: Polycarbonate, metallized.

Leads: Solder-coated copper clad steel.

Capacitance (Cap.) value: See table I.

Cap. tolerance: See table I.

Rated voltage: See table I (ac and dc voltages).

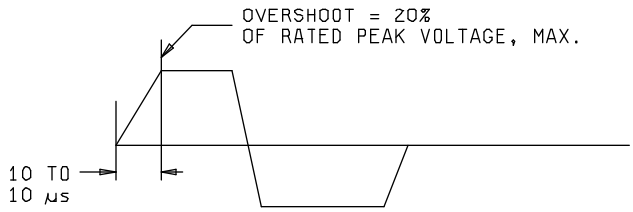
Operating temperature range: -55°C to +125°C for dc operation (with derating in accordance with table III of MIL-PRF-55514); -55°C to +105°C for ac operation.

Product level: Non-established reliability - C; Established reliability - M, P, R, and S.

Preconditioning: Not applicable.

Burn in: In accordance with MIL-PRF-55514 except paragraph (b) shall be at +105°C, +0°C, -5°C, and the applied voltage shall be 120 percent of the rms voltage specified in table I.

Dielectric withstanding voltage (DWV): In accordance with MIL-PRF-55514 with the following exceptions:



Terminal to terminal:

AC: 100 Hz ±10 Hz square wave, peak-to-peak voltage, two times dc rated voltage for 60 seconds.

DC: 200 percent of dc rated voltage for 60 seconds, minimum.

Insulation resistance (IR): In accordance with MIL-PRF-55514, except charge time 5 minutes, maximum; however, for cap. Values greater than 1.0 µF, an additional 1 minute per µF is permitted.

Capacitance: within the specified tolerance. In accordance with MIL-PRF-55514 except that capacitors having a nominal capacitance of 1 µF or greater shall be measured at 100 Hz ±10 Hz.

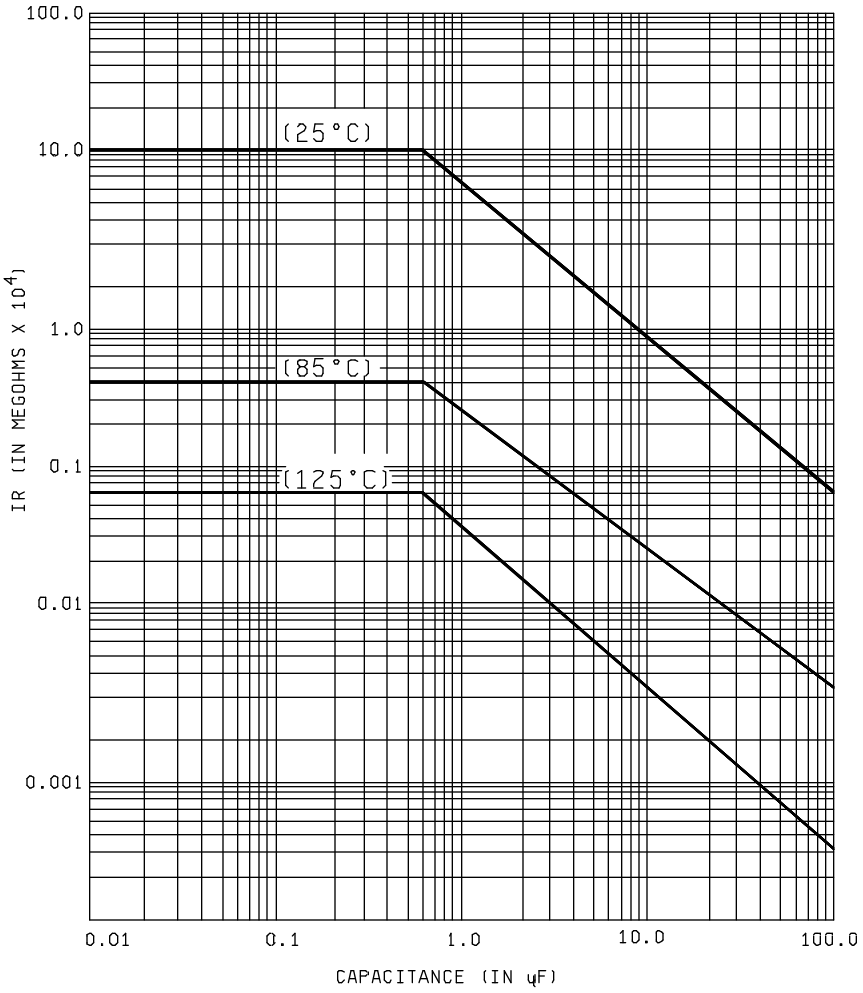


FIGURE 2. Insulation resistance vs. capacitance value.

Dissipation factor (DF): 0.3 percent, maximum. In accordance with MIL-PRF-55514 except that capacitors having a nominal capacitance of 1 μF or greater shall be measured at 100 Hz ±10 Hz.

Low temperature conditioning and capacitance change with temperature: In accordance with MIL-PRF-55514.

Resistance to soldering heat: Method 210 of MIL-STD-202, condition B.
ΔCap.: Maximum of ±0.25 percent.

Life (at +85°C): In accordance with 2,000 hour (qualification inspection) of MIL-PRF-55514, except:

Accelerated condition: 125 percent of +85°C rated voltage.

Rated condition: 100 percent of +85°C rated voltage.
IR (terminal to terminal) (at +25°C): Not less than 33.3 percent of initial requirement.
ΔCap.: Maximum of ±5.0 percent.
DF (at +25°C) after life: 0.6 percent, maximum.

AC conditioning: Capacitors shall be exposed to 120 percent of the 400 Hz voltage specified in table I at + 105°C, +0°C, -5°C.

Test samples shall be in accordance with table II.

Post test requirements:
DF (at +105°C): 0.5 percent, maximum.
IR (terminal to terminal) (at +25°C): Not less than 33.3 percent of initial requirement.
ΔCap.: Maximum of ±5.0 percent.
DF (at +25°C) after life: 0.6 percent, maximum.

TABLE II. AC conditioning test samples.

DC rated voltage (volts)	Total cap. Value of sample (μF)	Cap. Range for selection of sample 1/
50	40	.056 to 18.0 μF
75	40	.033 to 15.0 μF
100	20	.027 to 10.0 μF
150	40	.015 to 5.0 μF
200	20	.010 to 3.9 μF

1/ Each test sample shall contain at least one capacitor of the highest and lowest capacitance value of each voltage group manufactured during the three month period.

Marking: In accordance with MIL-PRF-55514.

NOTE: Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodian:
Army - CR
Navy - EC
Air Force - 85

Review activities:
Air Force - 17, 19, 99
Navy - AS, MC, OS

Preparing activity:
DLA - CC

(Project 5910-1962)