

INCH-POUND

MIL-PRF-20/29D
21 June 2001
SUPERSEDING
MIL-PRF-20/29C
9 May 1989

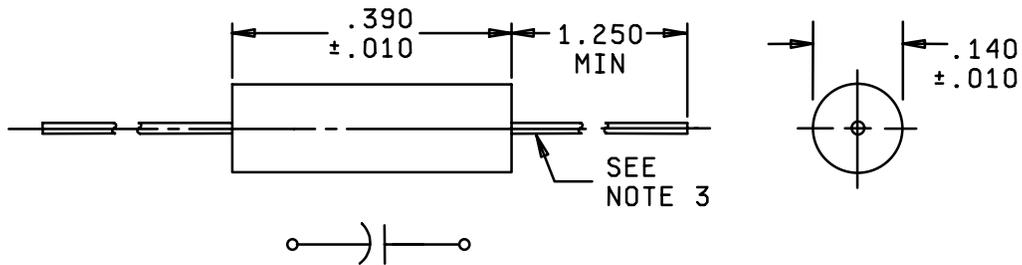
PERFORMANCE SPECIFICATION SHEET

CAPACITORS, FIXED, CERAMIC DIELECTRIC
(TEMPERATURE COMPENSATING),
ESTABLISHED AND NON-ESTABLISHED RELIABILITY,
STYLES CCR77 AND CC77

CC77 is inactive for new design after
26 March 1984. Use CCR77

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

The requirements for acquiring the capacitors described herein shall
consist of this specification and the latest issue of MIL-PRF-20.



CIRCUIT DIAGRAM

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Lead diameter shall be $.015$ (0.38 mm) to $.027$ (0.69 mm).
4. Lead length may be a minimum of 1.00 inch (25.4 mm) long for use in tape and reel packaging, when specified in the ordering data.

Inches	mm
.001	0.03
.005	0.13
.010	0.25
.016	0.41
.090	2.29
.160	4.06
1.250	31.75

FIGURE 1. Styles CCR77 and CC77 capacitors.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

Lead type: Axial.

Case type: Tubular, molded.

DC rated voltage: See table I.

Operating temperature range: -55°C to +125°C.

Characteristic: CG.

Failure rate level (CCR77 only): M (1.0 percent), P (0.1 percent), R (0.01 percent) or S (0.001 percent).

TABLE I. Capacitor characteristics.

Type designation <u>1/</u> <u>2/</u>	Rated voltage (volts, dc)	Nominal capacitance (pF)	Capacitance tolerance	Type designation <u>1/</u> <u>2/</u>	Rated voltage (volts, dc)	Nominal capacitance (pF)	Capacitance tolerance
CC-77CG151--	200	150	FGJ	CC-77CG102--	100	1000	FGJ
CC-77CG161--	200	160	FGJ	CC-77CG112--	100	1100	FGJ
CC-77CG181--	200	180	FGJ	CC-77CG122--	100	1200	FGJ
CC-77CG201--	200	200	FGJ	CC-77CG132--	100	1300	FGJ
CC-77CG221--	200	220	FGJ	CC-77CG152--	100	1500	FGJ
CC-77CG241--	200	240	FGJ	CC-77CG162--	100	1600	FGJ
CC-77CG271--	200	270	FGJ	CC-77CG182--	100	1800	FGJ
CC-77CG301--	200	300	FGJ	CC-77CG202--	100	2000	FGJ
CC-77CG331--	200	330	FGJ	CC-77CG222--	100	2200	FGJ
CC-77CG361--	200	360	FGJ	CC-77CG242--	50	2400	FGJ
CC-77CG391--	200	390	FGJ	CC-77CG272--	50	2700	FGJ
CC-77CG431--	200	430	FGJ	CC-77CG302--	50	3000	FGJ
CC-77CG471--	200	470	FGJ	CC-77CG332--	50	3300	FGJ
CC-77CG511--	200	510	FGJ	CC-77CG362--	50	3600	FGJ
CC-77CG561--	200	560	FGJ	CC-77CG392--	50	3900	FGJ
CC-77CG621--	200	620	FGJ	CC-77CG432--	50	4300	FGJ
CC-77CG681--	200	680	FGJ	CC-77CG472--	50	4700	FGJ
CC-77CG751--	100	750	FGJ	CC-77CG512--	50	5100	FGJK
CC-77CG821--	100	820	FGJ	CC-77CG562--	50	5600	FGJK
CC-77CG911--	100	910					

1/ Complete type designation will include the following:

1st dash - Symbol "R" (for style CCR77) or dash will be deleted (for style CC77).

2nd dash - Applicable capacitance tolerance symbol.

3rd dash - Applicable failure rate level symbol (CCR77 only) or dash will be deleted (for style CC77).

2/ Capacitors deleted since previous revisions shall be replaced by selecting a capacitor with the nearest parameter.

MIL-PRF-20/29D

Thermal shock and voltage conditioning (CCR77 only): In accordance with MIL-PRF-20.

Capacitance: Within tolerance specified (see table I).

Dissipation factor: In accordance with MIL-PRF-20.

Dielectric withstanding voltage: In accordance with MIL-PRF-20.

Body insulation: Test II.

Solderability: In accordance with MIL-PRF-20.

Resistance to soldering heat: In accordance with MIL-PRF-20.

Life: In accordance with MIL-PRF-20, operating condition 2.

Marking: Method I of MIL-STD-1285, as shown in the following example:

ER

Type designation	CCR77C
	G151FM
"J" brand and CAGE code	J12345
Date code and lot code (lot code may require two characters)	0120A

NON-ER

Type designation	CC77C
	G151F
CAGE code	12345
Date code and lot code (lot code may require two characters)	0120A

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

Preparing activity:
DLA - CC

(Project 5910-2116-03)

Review activities:
Navy - AS, MC, OS, SH