

INCH-POUND

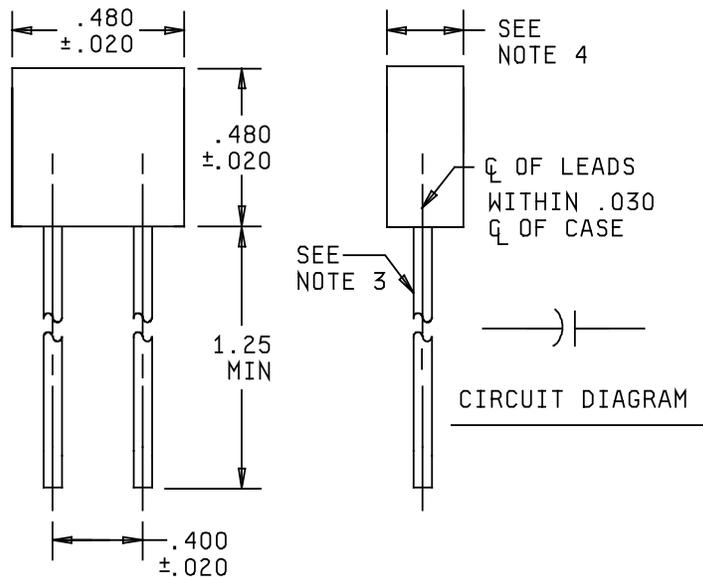
MIL-PRF-20/37F
21 April 2011
SUPERSEDING
MIL-PRF-20/37E
21 June 2001

PERFORMANCE SPECIFICATION SHEET
CAPACITORS, FIXED, CERAMIC DIELECTRIC
(TEMPERATURE COMPENSATING),
ESTABLISHED AND NON-ESTABLISHED RELIABILITY,
STYLES CCR07 AND CC07

Style CC07 is inactive for new design
after 21 April 2011. Use CCR07.

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 sheet and [MIL-PRF-20](#).



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Lead diameter shall be $.025 +.004, -.001$ ($0.64 +0.10, -0.03$ mm).
4. Thickness shall be $.200$ max (5.08 mm) for $100,000$ pF capacitors or $.140 \pm .010$ (3.56 ± 0.25 mm) for all other capacitors.

Inches	mm
.020	0.51
.030	0.76
.400	10.16
.480	12.19
1.250	31.80

FIGURE 1. Styles CCR07 and CC07 capacitors.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

Lead type: Radial.

Case type: Molded.

DC rated voltage: See table I.

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

Characteristic: CG.

Failure rate level (CCR07 only): M (1.0 percent), P (0.1 percent), R (.01 percent) or S (.001 percent).

Thermal shock and voltage conditioning (CCR07 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.

TABLE I. Capacitor characteristics.

PIN 1/ 2/	Rated voltage (volts, dc)	Nominal capacitance (pF)	Capacitance tolerance	PIN 1/ 2/	Rated voltage (volts, dc)	Nominal capacitance (pF)	Capacitance tolerance
CC-07CG222--	200	2,200	FGJK	CC-07CG183--	50	18,000	FGJK
CC-07CG272--	200	2,700	FGJK	CC-07CG223--	50	22,000	FGJK
CC-07CG332--	200	3,300	FGJK	CC-07CG273--	50	27,000	FGJK
CC-07CG392--	200	3,900	FGJK	CC-07CG333--	50	33,000	FGJK
CC-07CG472--	200	4,700	FGJK	CC-07CG393--	50	39,000	FGJK
CC-07CG562--	100	5,600	FGJK	CC-07CG473--	50	47,000	FGJK
CC-07CG682--	100	6,800	FGJK	CC-07CG563--	50	56,000	FGJK
CC-07CG822--	100	8,200	FGJK	CC-07CG683--	50	68,000	FGJK
CC-07CG103--	100	10,000	FGJK	CC-07CG823--	50	82,000	FGJK
CC-07CG123--	100	12,000	FGJK	CC-07CG104--	50	100,000	FGJK
CC-07CG153--	50	15,000	FGJK				

1/ Complete PIN will include the following:

1st dash - Symbol "R" (for style CCR07) or dash will be deleted (for style CC07).

2nd dash - Applicable capacitance tolerance symbol.

3rd dash - Applicable failure rate level symbol (CCR07 only) or dash will be deleted (for style CC07).

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

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.

Part or Identifying Number (PIN): In accordance with MIL-PRF-20 and table I.

Marking: In accordance with MIL-PRF-20.

Changes from previous issue: The margins of this specification sheet are marked with vertical lines to indicate where changes from the 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:
DLA - CC

(Project 5910-2011-018)

Review activities:

Army - AV
Navy - AS, MC, OS, SH
Air Force - 99

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.daps.dla.mil>.