

INCH-POUND

MIL-PRF-20/38C  
21 April 2011  
SUPERSEDING  
MIL-PRF-20/38B  
21 June 2001

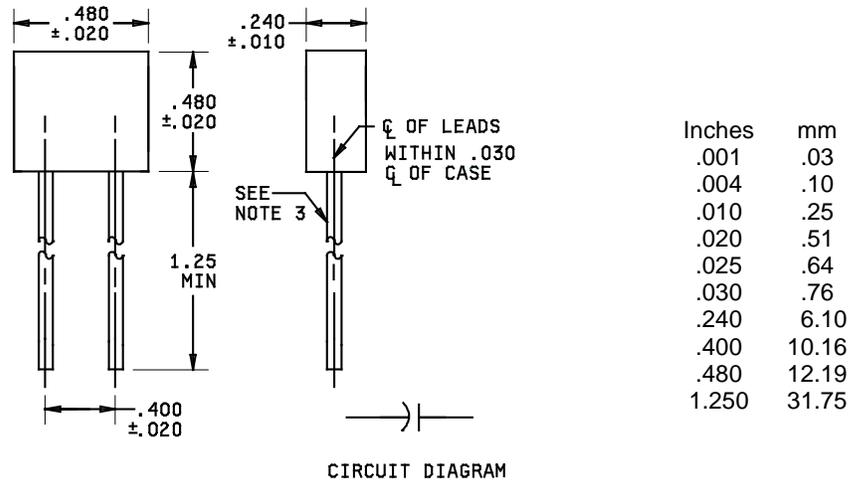
PERFORMANCE SPECIFICATION SHEET

CAPACITORS, FIXED, CERAMIC DIELECTRIC  
(TEMPERATURE COMPENSATING),  
ESTABLISHED AND NON-ESTABLISHED RELIABILITY,  
STYLES CCR08 AND CC08

Style CC08 is inactive for new design  
after 21 April 2011. Use CCR08.

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).

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 (CCR08 only): M (1.0 percent), P (0.1 percent), R (.01 percent) or S (.001 percent).

Thermal shock and voltage conditioning (CCR08 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/	Rated voltage (volts, dc)	Nominal capacitance (pF)	Capacitance tolerance	PIN 1/	Rated voltage (volts, dc)	Nominal capacitance (pF)	Capacitance tolerance
CC-08CG392--	200	3,900	GJK	CC-08CG183--	100	18,000	GJK
CC-08CG472--	200	4,700	GJK	CC-08CG563--	50	56,000	GJK
CC-08CG153--	100	15,000	GJK	CC-08CG683--	50	68,000	GJK

1/ Complete PIN will include the following:

1st dash - Symbol "R" (for style CCR08) or dash will be deleted (for style CC08).

2nd dash - Applicable capacitance tolerance symbol.

3rd dash - Applicable failure rate level symbol (CCR08 only) or dash will be deleted (for style CC08).

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 5910-2011-019)

Review activities:

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>.