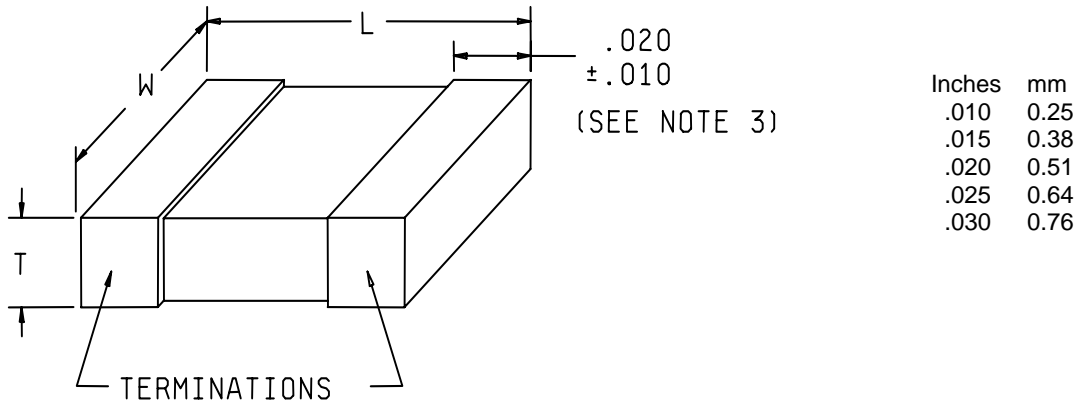


PERFORMANCE SPECIFICATION SHEET

CAPACITORS, CHIP, MULTIPLE LAYER, FIXED, CERAMIC DIELECTRIC,  
ESTABLISHED RELIABILITY AND NON-ESTABLISHED RELIABILITY,  
STYLES CDR01, CDR02, CDR03, AND CDR04

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 sheet and [MIL-PRF-55681](#).



Dimensions				
Style	L ± .015 (0.38)	W ± .015 (0.38)	T	
			Min	Max
CDR01	.080 (2.03)	.050 (1.27)	.022 (0.56)	.055 (1.40)
CDR02	.180 (4.57)	.050 (1.27)	.022 (0.56)	.055 (1.40)
CDR03	.180 (4.57)	.080 (2.03)	.022 (0.56)	.080 (2.03)
CDR04	.180 (4.57)	.125 (3.18)	.022 (0.56)	.080 (2.03)

FIGURE 1. Styles CDR01, CDR02, CDR03, and CDR04 capacitors

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NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. For style CDR01, termination width shall be .010 inch (0.25 mm), minimum; uncovered band width shall be .030 inch (0.76 mm), minimum.
4. Dimensions and tolerances are for bare chips. For solder coated terminations, for style CDR01 add .020 inch (0.51 mm) to the positive length tolerance and .015 inch (0.38 mm) to the positive width and thickness tolerance. For solder coated terminations for styles CDR02, CDR03, and CDR04, add .025 inch (0.64 mm) to the positive length tolerance and .015 inch (0.38 mm) to the positive width and thickness tolerance.

FIGURE 1. Styles CDR01, CDR02, CDR03, and CDR04 capacitors - Continued.

REQUIREMENTS:

Dimensions and configuration: See [figure 1](#) and [table I](#).

Capacitance value: See [table I](#).

Capacitance tolerance: J =  $\pm 5$  percent; K =  $\pm 10$  percent; M =  $\pm 20$  percent. See [table I](#).

Rated voltage: See [table I](#).

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

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

Marking: In accordance with [MIL-PRF-55681](#).

## MIL-PRF-55681/1F

TABLE I. CDR01, CDR02, CDR03, and CDR04 capacitors characteristics

Part or Identifying Number (PIN) <u>1/</u>	Capacitance pF	Capacitance tolerance	Rated temperature and voltage-temperature limits	Rated voltage V dc
CDR01BP100B ---	10	J, K	BP	100
CDR01BP120BJ --	12	J	BP	100
CDR01BP150B ---	15	J, K	BP	100
CDR01BP180BJ --	18	J	BP	100
CDR01BP220B ---	22	J, K	BP	100
CDR01BP270BJ --	27	J	BP	100
CDR01BP330B ---	33	J, K	BP	100
CDR01BP390BJ --	39	J	BP	100
CDR01BP470B ---	47	J, K	BP	100
CDR01BP560BJ --	56	J	BP	100
CDR01BP680B ---	68	J, K	BP	100
CDR01BP820BJ --	82	J	BP	100
CDR01BP101B ---	100	J, K	BP	100
CDR01B-121B ---	120	J, K	BP, BX	100
CDR01B-151B ---	150	J, K	BP, BX	100
CDR01B-181B ---	180	J, K	BP, BX	100
CDR01BX221B ---	220	K, M	BX	100
CDR01BX271BK --	270	K	BX	100
CDR01BX331B ---	330	K, M	BX	100
CDR01BX391BK --	390	K	BX	100
CDR01BX471B ---	470	K, M	BX	100
CDR01BX561BK --	560	K	BX	100
CDR01BX681B ---	680	K, M	BX	100
CDR01BX821BK --	820	K	BX	100
CDR01BX102B ---	1,000	K, M	BX	100
CDR01BX122BK --	1,200	K	BX	100
CDR01BX152B ---	1,500	K, M	BX	100
CDR01BX182BK --	1,800	K	BX	100
CDR01BX222B ---	2,200	K, M	BX	100
CDR01BX272BK --	2,700	K	BX	100
CDR01BX332B ---	3,300	K, M	BX	100
CDR01BX392AK --	3,900	K	BX	50
CDR01BX472A ---	4,700	K, M	BX	50
CDR02BP221B ---	220	J, K	BP	100
CDR02BP271BJ --	270	J	BP	100
CDR02BX392BK --	3,900	K	BX	100
CDR02BX472B ---	4,700	K, M	BX	100
CDR02BX562BK --	5,600	K	BX	100
CDR02BX682B ---	6,800	K, M	BX	100
CDR02BX822BK --	8,200	K	BX	100
CDR02BX103B ---	10,000	K, M	BX	100
CDR02BX123AK --	12,000	K	BX	50
CDR02BX153A ---	15,000	K, M	BX	50
CDR02BX183AK --	18,000	K	BX	50
CDR02BX223A ---	22,000	K, M	BX	50

See footnote at end of table.

TABLE I. CDR01, CDR02, CDR03, and CDR04 capacitors characteristics - Continued

PIN <sup>1/</sup>	Capacitance pF	Capacitance tolerance	Rated temperature and voltage- temperature limits	Rated voltage V dc
CDR03BP331B ---	330	J, K	BP	100
CDR03BP391BJ --	390	J	BP	100
CDR03BP471B ---	470	J, K	BP	100
CDR03BP561BJ --	560	J	BP	100
CDR03BP681B ---	680	J, K	BP	100
CDR03BP821BJ --	820	J	BP	100
CDR03BP102B ---	1,000	J, K	BP	100
CDR03BX123BK --	12,000	K	BX	100
CDR03BX153B ---	15,000	K, M	BX	100
CDR03BX183BK --	18,000	K	BX	100
CDR03BX223B ---	22,000	K, M	BX	100
CDR03BX273BK --	27,000	K	BX	100
CDR03BX333B ---	33,000	K, M	BX	100
CDR03BX393AK --	39,000	K	BX	50
CDR03BX473A ---	47,000	K, M	BX	50
CDR03BX563AK --	56,000	K	BX	50
CDR03BX683A ---	68,000	K, M	BX	50
CDR04BP122BJ --	1,200	J	BP	100
CDR04BP152B ---	1,500	J, K	BP	100
CDR04BP182BJ --	1,800	J	BP	100
CDR04BP222B ---	2,200	J, K	BP	100
CDR04BP272BJ --	2,700	J	BP	100
CDR04BP332B ---	3,300	J, K	BP	100
CDR04BX393BK --	39,000	K	BX	100
CDR04BX473B ---	47,000	K, M	BX	100
CDR04BX563BK --	56,000	K	BX	100
CDR04BX823AK --	82,000	K	BX	50
CDR04BX104A ---	100,000	K, M	BX	50
CDR04BX124AK --	120,000	K	BX	50
CDR04BX154A ---	150,000	K, M	BX	50
CDR04BX184AK --	180,000	K	BX	50

<sup>1/</sup> Complete PIN shall include additional symbol(s) to indicate voltage-temperature limit (where applicable), capacitance tolerance (where applicable), termination finish, and product level.

CHANGES FROM PREVIOUS ISSUE: The margins of this specification sheet are marked with asterisks 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 – 11  
DLA – CC

Preparing activity:  
Army - CR

Agent:  
DLA - CC

Review activities:  
Army - MI  
Navy - AS, MC, OS, SH  
Air Force - 19, 99

(Project 5910-2006-047)

\* 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 <http://assist.daps.dla.mil>.