

PERFORMANCE SPECIFICATION SHEET
CAPACITOR, FIXED, CERAMIC DIELECTRIC
(TEMPERATURE STABLE AND GENERAL PURPOSE),
HIGH RELIABILITY, LEADED,
STYLE CKS22

This specification sheet 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-123](#).

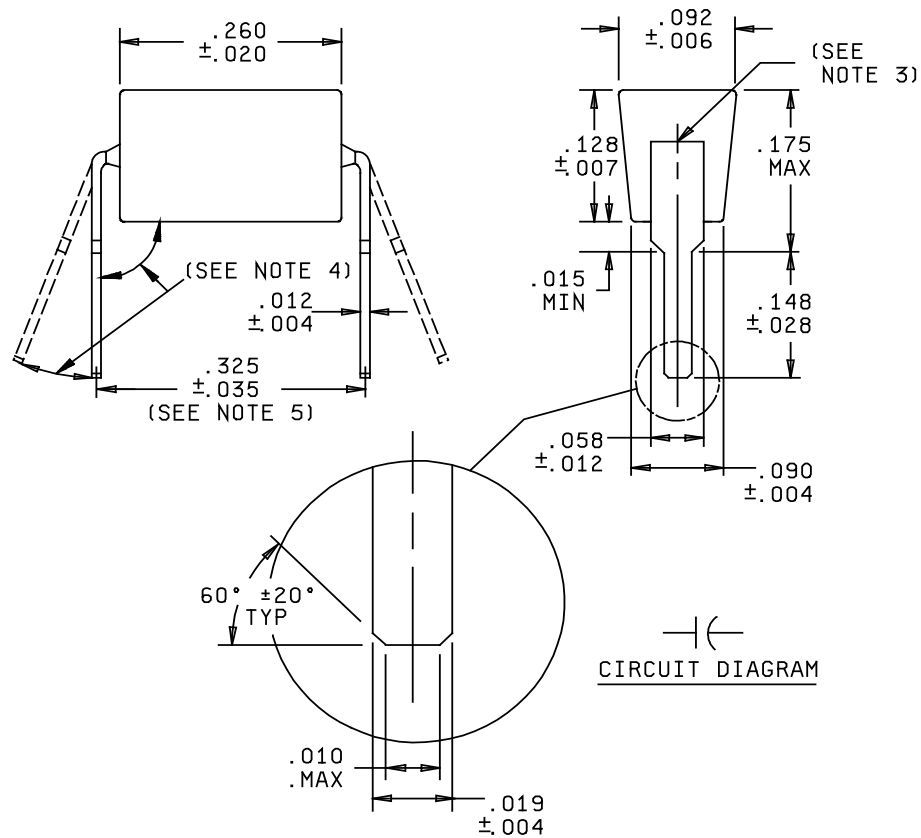


FIGURE 1. Style CKS22 capacitors.



MIL-PRF-123/16E

Inches	mm	Inches	mm	Inches	mm
.004	0.10	.019	0.48	.092	2.34
.006	0.15	.020	0.51	.128	3.25
.007	0.18	.028	0.71	.148	3.76
.010	0.25	.035	0.89	.175	4.44
.012	0.30	.058	1.47	.260	6.60
.015	0.38	.090	2.29	.325	8.26

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are in millimeters and are given for general information only.
3. Leads shall be centered within $\pm .005$ inch (0.13 mm).
4. The angle shall be $95^\circ +10^\circ, -5^\circ$.
5. The distance between the centers of the mounting holes will be $.300$ inch $\pm .010$ inch (7.62 mm ± 0.25 mm).
6. Nonconductive material shall not extend beyond $.030$ inch (0.76 mm) from the edge of the capacitor body.

FIGURE 1. Style CKS22 capacitors - Continued.

REQUIREMENTS:

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

Case type: Molded plastic, encapsulated.

Lead wire: Type C of [MIL-PRF-123](#).

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

Capacitance tolerance: See [table I](#) (D = ± 0.5 pF, F = ± 1 percent; J = ± 5 percent; K = ± 10 percent, M = ± 20 percent).

Voltage-temperature limit: BP and BX in accordance with [MIL-PRF-123](#).

Operating temperature: -55°C to $+125^\circ\text{C}$.

Voltage rating: See [table I](#) (B = 50 Vdc; C = 100 Vdc; D = 200 Vdc).

Temperature coefficient tolerances for BP values below 20 pF: In accordance with [MIL-PRF-123](#).

Pre-encapsulation terminal strength: In accordance with [MIL-PRF-123](#).

Marking: In accordance with [MIL-PRF-123](#), example 6.

MIL-PRF-123/16E

TABLE I. Style CKS22 characteristics.

Part or Identifying Number (PIN) <u>1/</u>	Capacitance (pF)	Capacitance tolerance	Voltage-temperature limits	Rated voltage (V dc)
M123A16BPD1R0DC	1.0	D	BP	200
M123A16BPD1R2DC	1.2	D	BP	200
M123A16BPD1R5DC	1.5	D	BP	200
M123A16BPD1R8DC	1.8	D	BP	200
M123A16BPD2R2DC	2.2	D	BP	200
M123A16BPD2R7DC	2.7	D	BP	200
M123A16BPD3R3DC	3.3	D	BP	200
M123A16BPD3R9DC	3.9	D	BP	200
M123A16BPD4R7DC	4.7	D	BP	200
M123A16BPD5R6DC	5.6	D	BP	200
M123A16BPD6R8DC	6.8	D	BP	200
M123A16BPD8R2DC	8.2	D	BP	200
M123A16BPD100-C	10	D, J, K	BP	200
M123A16BPD120-C	12	D, J, K	BP	200
M123A16BPD150-C	15	D, J, K	BP	200
M123A16BPD180-C	18	D, J, K	BP	200
M123A16BPD220-C	22	D, J, K	BP	200
M123A16BPD270-C	27	D, J, K	BP	200
M123A16BPD330-C	33	D, J, K	BP	200
M123A16BPD390-C	39	D, J, K	BP	200
M123A16BPD470-C	47	D, J, K	BP	200
M123A16BPD560-C	56	D, J, K	BP	200
M123A16BPD680-C	68	F, J, K	BP	200
M123A16BPD820-C	82	F, J, K	BP	200
M123A16BPD101-C	100	F, J, K	BP	200
M123A16BPD121-C	120	F, J, K	BP	200
M123A16BPD151-C	150	F, J, K	BP	200
M123A16BPD181-C	180	F, J, K	BP	200
M123A16BPD221-C	220	F, J, K	BP	200
M123A16BPD271-C	270	F, J, K	BP	200
M123A16BPD331-C	330	F, J, K	BP	200
M123A16BPD391-C	390	F, J, K	BP	200
M123A16BPD471-C	470	F, J, K	BP	200
M123A16BPC561-C	560	F, J, K	BP	100
M123A16BPC681-C	680	F, J, K	BP	100
M123A16BPC821-C	820	F, J, K	BP	100
M123A16BPC102-C	1,000	F, J, K	BP	100
M123A16BPC122-C	1,200	F, J, K	BP	100
M123A16BPC152-C	1,500	F, J, K	BP	100
M123A16BPC182-C	1,800	F, J, K	BP	100
M123A16BPC222-C	2,200	F, J, K	BP	100
M123A16BPB272-C	2,700	F, J, K	BP	50
M123A16BPB332-C	3,300	F, J, K	BP	50
M123A16BPB392-C	3,900	F, J, K	BP	50
M123A16BPB472-C	4,700	F, J, K	BP	50
M123A16BXD271KC	270	K	BX	200
M123A16BXD331-C	330	K, M	BX	200
M123A16BXD391KC	390	K	BX	200
M123A16BXD471-C	470	K, M	BX	200
M123A16BXD561KC	560	K	BX	200

See footnote at end of table.

TABLE I. Style CKS22 characteristics - Continued.

PIN ^{1/}	Capacitance (pF)	Capacitance tolerance	Voltage-temperature limits	Rated voltage (V dc)
M123A16BXD681-C	680	K, M	BX	200
M123A16BXD821KC	820	K	BX	200
M123A16BXC102-C	1,000	K, M	BX	100
M123A16BXC122KC	1,200	K	BX	100
M123A16BXC152-C	1,500	K, M	BX	100
M123A16BXC182KC	1,800	K	BX	100
M123A16BXC222-C	2,200	K, M	BX	100
M123A16BXC272KC	2,700	K	BX	100
M123A16BXC332-C	3,300	K, M	BX	100
M123A16BXC392KC	3,900	K	BX	100
M123A16BXC472-C	4,700	K, M	BX	100
M123A16BXC562KC	5,600	K	BX	100
M123A16BXC682-C	6,800	K, M	BX	100
M123A16BXC822KC	8,200	K	BX	100
M123A16BXC103-C	10,000	K, M	BX	100
M123A16BXB123KC	12,000	K	BX	50
M123A16BXB153-C	15,000	K, M	BX	50
M123A16BXB183KC	18,000	K	BX	50
M123A16BXB223-C	22,000	K, M	BX	50
M123A16BXB273KC	27,000	K	BX	50
M123A16BXB333-C	33,000	K, M	BX	50
M123A16BXB393KC	39,000	K	BX	50
M123A16BXB473-C	47,000	K, M	BX	50
M123A16BXB563KC	56,000	K	BX	50
M123A16BXB683-C	68,000	K, M	BX	50
M123A16BXB823KC	82,000	K	BX	50
M123A16BXB104-C	100,000	K, M	BX	50

^{1/} The complete PIN will include additional letter(s) to indicate capacitance tolerance, as applicable.

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 previous issue.

Custodians:
Navy - EC
Air Force - 19
DLA - CC
Other - NA

Preparing activity:
DLA - CC

(Project 5910-2024-040)

Review activities:
Air Force – 85

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 ASSIST Online database at <https://assist.dla.mil/>.