

INCH-POUND

MIL-C-11015/2D  
14 May 2001  
SUPERSEDING  
MIL-C-11015/2C  
6 December 1967

MILITARY SPECIFICATION SHEET

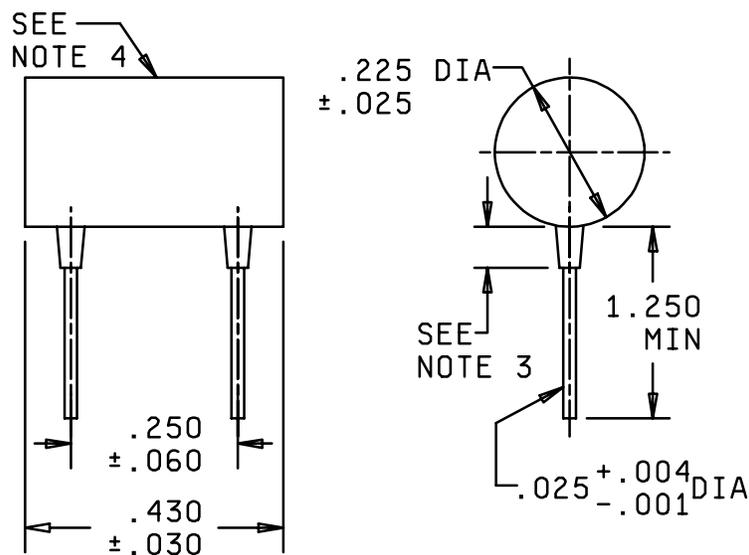
CAPACITORS, FIXED, CERAMIC DIELECTRIC (GENERAL PURPOSE),

STYLE CK22

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 and MIL-C-11015.

INACTIVE FOR NEW DESIGN.  
FOR REPLACEMENT PURPOSES ONLY



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Insulating coating shall not extend more than .125 (3.18 mm) along lead wires measured from body of capacitor.
4. The beginning of the type designation shall be adjacent to the end having the inner-electrode terminal.

Inches	mm
.001	.03
.004	.10
.025	.64
.030	.76
.060	1.52
.225	5.72
.250	6.35
.430	10.92
1.250	31.75

FIGURE 1. Dimensions and configuration.

TABLE I. Style CK22 characteristics.

PIN <sup>1/</sup>	Rated voltage	Rated temperature and voltage-temperature limits	Capacitance	Capacitance tolerance
	Volts, dc		pF	
CK22AX120K	500	AX	12	K
CK22AX150K	500	AX	15	K
CK22AX180K	500	AX	18	K
CK22AX220K	500	AX	22	K
CK22AX270K	500	AX	27	K
CK22AX330K	500	AX	33	K
CK22AX390K	500	AX	39	K
CK22AX470K	500	AX	47	K
CK22AX560K	500	AX	56	K
CK22AX680-	500	AX	68	K, M
CK22AX820K	500	AX	82	K
CK22AX101-	500	AX	100	K, M
CK22AX121K	500	AX	120	K
CK22AX151-	500	AX	150	K, M
CK22AX181K	500	AX	180	K
CK22AX221-	500	AX	220	K, M
CK22AX271K	500	AX	270	K
CK22AX331-	500	AX	330	K, M
CK22AX391K	500	AX	390	K
CK22AX471-	500	AX	470	K, M
CK22AX561K	500	AX	560	K
CK22AX681-	500	AX	680	K, M

<sup>1/</sup> Where applicable, the complete PIN will include an additional symbol to indicate capacitance tolerance.

#### REQUIREMENTS

##### Design and construction:

Dimensions and configuration - See figure 1.

Case type - Tubular with radial leads.

Capacitance value - See table I.

Capacitance tolerance -  $\pm 10$  percent (K) or  $\pm 20$  percent (M) as shown in table I.

Rated temperature -  $-55^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .

Dielectric withstanding voltage: In accordance with MIL-C-11015.

##### Dielectric:

Test voltage - 250 percent of rated voltage.

Body insulation: Shall be able to withstand 1,300 volts for  $5 \pm 1$  seconds between leads and a V-block which shall extend beyond the ends of the capacitor body.

Barometric pressure (reduced): In accordance with MIL-C-11015 and method 105 of MIL-STD-202, 0.82 inch of mercury (80,000 ft).

Test potential - 150 percent of rated voltage.

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Insulation resistance (IR): In accordance with MIL-C-11015 and method 302 of MIL-STD-202, condition B. 20,000 megohms, minimum.

Dissipation factor (DF): 1.5 percent, maximum.

Shock, specified pulse: Not applicable.

Vibration, high frequency: In accordance with MIL-C-11015 and method 204 of MIL-STD-202, condition B (15 g's).

Thermal shock and immersion: In accordance with MIL-C-11015.

IR - 3,000 megohms, minimum.

Salt spray (corrosion): Not applicable.

Terminal strength: In accordance with MIL-C-11015.

Moisture resistance: In accordance with MIL-C-11015.

IR - 3,000 megohms, minimum.

Solderability: In accordance with MIL-C-11015; 2 terminals.

Resistance to soldering heat: Not applicable.

Voltage-temperature limits: In accordance with MIL-C-11015.

Life (at elevated ambient temperature): In accordance with MIL-C-11015.

Test potential - 200 percent of rated voltage.

IR - 500 megohms, minimum (at 85°C); 10,000 megohms, minimum (at 25°C).

DF - 3 percent, maximum (at 25°C).

Marking: In accordance with MIL-C-11015.

Changes from previous issue: Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:

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

Preparing activity:  
DLA - CC

(Project 5910-2069-01)

Review activities:

Army - MI  
Navy - MC  
Air Force - 19