

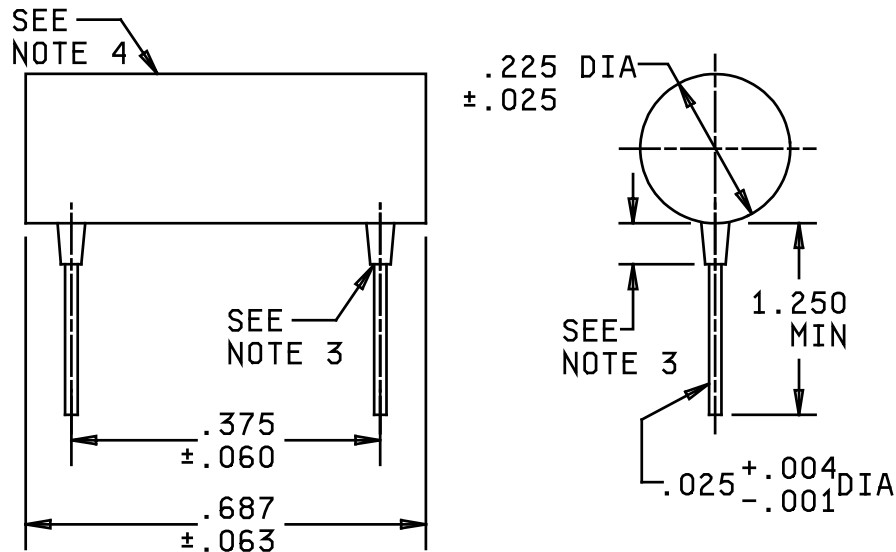
MILITARY SPECIFICATION SHEET

CAPACITOR, FIXED, CERAMIC DIELECTRIC (GENERAL PURPOSE),
STYLE CK27

INACTIVE FOR NEW DESIGN.
 FOR REPLACEMENT PURPOSES ONLY

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-C-11015](#).



NOTES:

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

Inches	mm
.001	0.03
.004	0.10
.025	0.64
.060	1.52
.063	1.60
.225	5.72
.375	9.53
.687	17.45
1.250	31.75

FIGURE 1. Dimensions and configuration.



REQUIREMENTS

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

Case type: Tubular with radial leads.

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

Capacitance tolerance: ± 10 percent (K) or ± 20 percent (M) as shown in [table I](#).

Rated temperature: -55°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 ± 1 second 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 [MIL-STD-202-105](#), 0.82 inch of mercury (80,000 ft).

Test potential: 150 percent of rated voltage.

| Insulation resistance (IR): In accordance with [MIL-C-11015](#) and [MIL-STD-202-302](#), 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 [MIL-STD-202-204](#), condition B (15 g's).

Thermal shock and immersion: In accordance with [MIL-C-11015](#).

IR: 3,000 megohms, minimum.

| Salt atmosphere (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.

TABLE I. Style CK27 characteristics.

PIN <u>1/</u>	Rated voltage (V _{dc})	Rated temperature and voltage-temperature limits	Capacitance (pF)	Capacitance tolerance
CK27AX821K	500	AX	820	K
CK27AX102-	500	AX	1,000	K, M
CK27AX122K	500	AX	1,200	K
CK27AX152-	500	AX	1,500	K, M

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

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](#).

Referenced documents: In addition to [MIL-C-11015](#), this document references the following:

[MIL-STD-202-105](#)
[MIL-STD-202-204](#)
[MIL-STD-202-302](#)

Changes from previous issue: The margins of this specification 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:
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Preparing activity:
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Review activities:
 Army - MI
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