

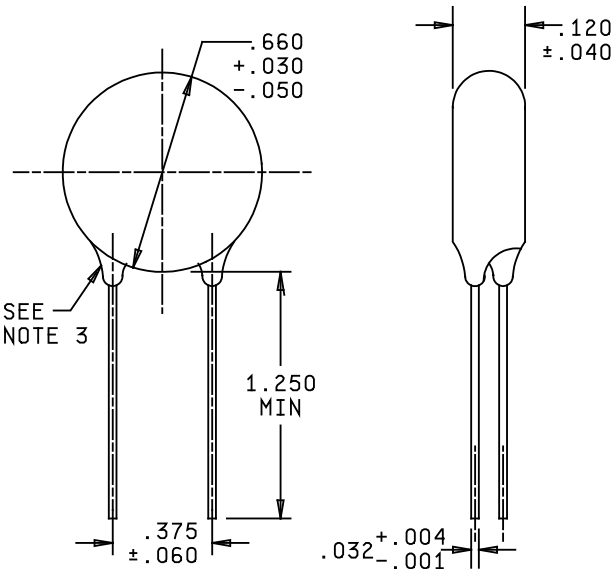
MILITARY SPECIFICATION SHEET

CAPACITOR, FIXED, CERAMIC DIELECTRIC (GENERAL PURPOSE),
STYLE CK63

INACTIVE FOR NEW DESIGN, AFTER 31 MARCH 1999.
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 a tangent to the coating surface drawn perpendicular to the lead wires.

Inches	mm
.001	0.03
.004	0.10
.030	0.76
.032	0.81
.040	1.02
.050	1.27
.060	1.52
.120	3.05
.375	9.53
.660	16.76
1.250	31.75

FIGURE 1. Dimensions and configuration.

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TABLE I. Style CK63 characteristics.

Part or identifying number (PIN) <u>1/</u>	Rated voltage (V _{dc})	Rated temperature and voltage-temperature limits	Capacitance (pF)	Capacitance tolerance
CK63CZ681--	500	CZ	680	K, M
CK63CZ821K-	500	CZ	820	K
CK63CZ102--	500	CZ	1,000	K, M
CK63CZ152--	500	CZ	1,500	K, M
CK63CZ222--	500	CZ	2,200	K, M
CK63BX222--	500	BX	2,200	K, M
CK63CZ332--	500	CZ	3,300	K, M
CK63BX332--	500	BX	3,300	K, M
CK63AW472M-	1,000	AW	4,700	M
CK63AY103M-	1,000	AY	10,000	M
CK63AW103M-	500	AW	10,000	M

1/ Where applicable, the complete PIN will include an additional symbol to indicate capacitance tolerance. The PIN will also include the letter "E" to indicate an epoxy coated capacitor (when applicable) or "-" will be deleted for wax impregnated case.

REQUIREMENTS

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

Case type: Disk, wax impregnated or epoxy coated (E).

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°C (A); or -55° to +125°C (B); or -55°C to +150°C (C) as shown in [table I](#).

Dielectric withstanding voltage (DWV): In accordance with [MIL-C-11015](#).

Dielectric:

Test voltage: 250 percent of rated voltage.

Body insulation:

Test potential: 1,300 volts dc.

Barometric pressure (reduced): In accordance with [MIL-C-11015](#) and [MIL-STD-202-105](#); condition B (50,000 ft) for voltage-temperature limit AY, or 0.82 inch of mercury (80,000 ft) for voltage-temperature limits AW, BX, and CZ.

Test potential: 150 percent of rated voltage.

Insulation resistance (IR): In accordance with [MIL-C-11015](#) and [MIL-STD-202-302](#), condition B. 200,000 megohms, minimum.

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Dissipation factor (DF): 2.0 percent maximum.

| Vibration, high frequency: In accordance with [MIL-C-11015](#) and [MIL-STD-202-204](#), condition D (20 g's).

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

DWV: 250 percent of rated voltage.

IR: 150,000 megohms, minimum.

| Salt atmosphere (corrosion): Not applicable.

Terminal strength: In accordance with [MIL-C-11015](#).

Moisture resistance: In accordance with [MIL-C-11015](#).

DWV: 250 percent of rated voltage.

IR: 150,000 megohms, minimum.

Cap.: Within tolerance of [table I](#) value.

Solderability: In accordance with [MIL-C-11015](#). 2 terminals.

Resistance to soldering heat: In accordance with [MIL-C-11015](#).

IR: 200,000 megohms, minimum.

Δ Cap.: ± 5 percent of initial measurement.

Δ DF: 0.5 percent, maximum.

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.

DWV: 250 percent of rated voltage (at +25°C).

IR: 100,000 megohms, minimum (at high temperature and +25°C).

Cap.: Within tolerance of [table I](#) value (at +25°C).

DF: 2.0 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:

Army - CR
Navy - EC
Air Force - 85
DLA - CC

Preparing Activity:

DLA - CC

Review activities:

Army - MI
Navy – AS, OS, SH
Air Force - 19

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NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil/>.