

INCH-POUND

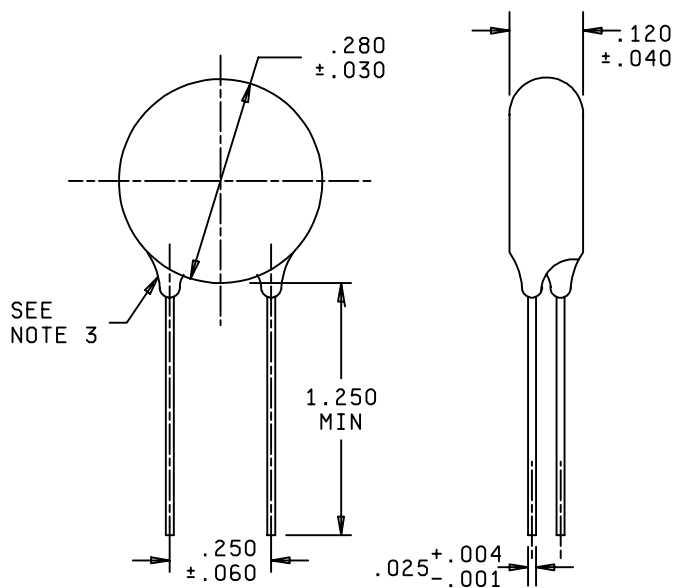
MIL-C-11015/9F
14 May 2001
SUPERSEDING
MIL-C-11015/9E
10 July 1980

MILITARY SPECIFICATION SHEET
CAPACITORS, FIXED, CERAMIC DIELECTRIC (GENERAL PURPOSE),
STYLE CK60

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 AFTER 31 MARCH 1999.
FOR REPLACEMENT PURPOSES ONLY.



Inches	mm
.001	.03
.004	.10
.025	.64
.030	.76
.040	1.02
.060	1.52
.120	3.05
.250	6.35
.280	7.11
1.250	31.75

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 a tangent to the coating surface drawn perpendicular to the lead wires.

FIGURE 1. Dimensions and configuration.

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TABLE I. Style CK60 characteristics.

PIN ^{1/}	Rated voltage	Rated temperature and voltage-temperature limits	Capacitance	Capacitance tolerance
	Volts, dc		pF	
CK60BX2R2K-	1,000	BX	2.2	K
CK60BX3R3K-	1,000	BX	3.3	K
CK60BX4R7K-	1,000	BX	4.7	K
CK60BX6R8K-	1,000	BX	6.8	K
CK60BX100K-	1,000	BX	10	K
CK60BX150K-	1,000	BX	15	K
CK60BX220K-	1,000	BX	22	K
CK60BX330--	1,000	BX	33	K, M
CK60BX470--	1,000	BX	47	K, M
CK60BX680--	1,000	BX	68	K, M
CK60BX101--	1,000	BX	100	K, M
CK60BX151--	500	BX	150	K, M
CK60AX221--	1,000	AX	220	K, M
CK60AX331--	500	AX	330	K, M
CK60AX471--	500	AX	470	K, M
CK60AW471M-	1,000	AW	470	M
CK60AW681M-	1,000	AW	680	M
CK60AW102M-	1,000	AW	1,000	M
CK60AW152M-	500	AW	1,500	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

Design and construction:

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 $+85^{\circ}\text{C}$ (A) or -55° to $+125^{\circ}\text{C}$ (B) 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 method 105 of MIL-STD-202, 0.82 inch of mercury (80,000 ft).

Test potential - 150 percent of rated voltage or 1,300 volts dc, whichever is less.

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

Dissipation factor (DF): 1.5 percent, maximum (voltage-temperature limit BX) or 2.0 percent, maximum (voltage-temperature limits AX or AW).

Vibration, high frequency: In accordance with MIL-C-11015 and method 204 of MIL-STD-202, 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 spray (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 - 1.5 percent, maximum (voltage-temperature limit BX) or 2.0 percent, maximum (voltage-temperature limit AX or AW) (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.

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Custodians:

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

Review activities:

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

Preparing activity:
DLA - CC

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