

INCH-POUND

MIL-C-11015/21F
14 May 2001
SUPERSEDING
MIL-C-11015/21E
10 July 1980

MILITARY SPECIFICATION SHEET

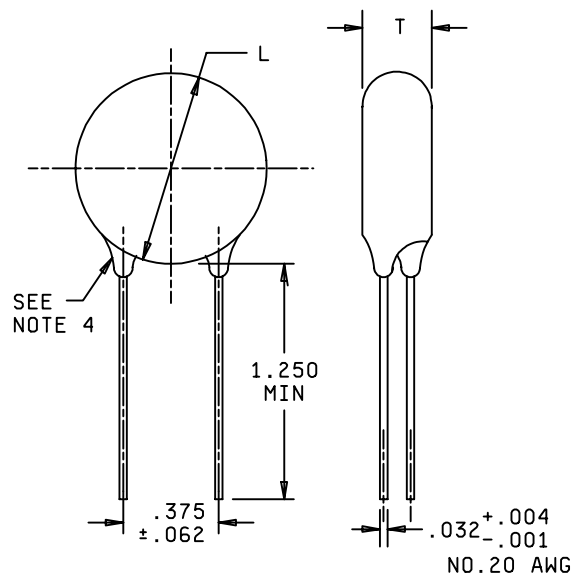
CAPACITORS, FIXED, CERAMIC DIELECTRIC (GENERAL PURPOSE),

STYLES CK64, CK65, CK66, CK67, CK68, and CK69

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
.032	.81
.062	1.57
.375	9.53
1.250	31.75

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are in parentheses.
3. Metric equivalents are given for general information only.
4. 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.

Style	Dimensions	
	L $\pm .040$ (1.02)	T $\pm .040$ (1.02)
CK64	.730 (18.54)	.167 (4.24)
CK65	.790 (20.07)	.167 (4.24)
CK66	.890 (22.61)	.167 (4.24)
CK67	.950 (24.13)	.167 (4.24)
CK68	1.050 (26.67)	.330 (8.38)
CK69	1.110 (28.19)	.330 (8.38)

FIGURE 1. Dimensions and configuration.

TABLE I. Styles CK64, CK65, CK66, CK67, CK68, and CK69 characteristics.

PIN <u>1/</u>	Rated voltage	Rated temperature and voltage-temperature limits	Capacitance	Capacitance tolerance
	Volts, dc		pF	
CK64AW511M-	1,600	AW	510	M
CK64AW681M-	1,600	AW	680	M
CK64AW821M-	1,600	AW	820	M
CK64AW102M-	1,600	AW	1,000	M
CK64AW152M-	1,600	AW	1,500	M
CK64AW222M-	1,600	AW	2,200	M
CK64AW332M-	1,600	AW	3,300	M
CK64AW392M-	1,600	AW	3,900	M
CK65AW472M-	1,600	AW	4,700	M
CK66AW562M-	1,600	AW	5,600	M
CK67AW682M-	1,600	AW	6,800	M
CK67AW752M-	1,600	AW	7,500	M
CK68AW103M-	1,600	AW	10,000	M
CK69AW153M-	1,600	AW	15,000	M

1/ The complete PIN will 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 - ± 20 percent (M).

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

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

Dielectric:

Test voltage - 250 percent of rated voltage.

Body insulation:

Test potential 3000 volts dc.

Barometric pressure (reduced): In accordance with MIL-C-11015 and method 105 of MIL-STD-202, condition B (50,000 ft).

Test potential - 2,000 volts dc.

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

MIL-C-11015/21F

Dissipation factor (DF): 2.0 percent maximum.

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 85°C 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.

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.

MIL-C-11015/21F

Custodians:

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

Preparing activity:

DLA - CC

(Project 5910-2069-09)

Review activities:

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