

INCH-POUND

MIL-C-11015/32B
14 May 2001
SUPERSEDING
MIL-C-11015/32A
15 December 1989

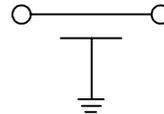
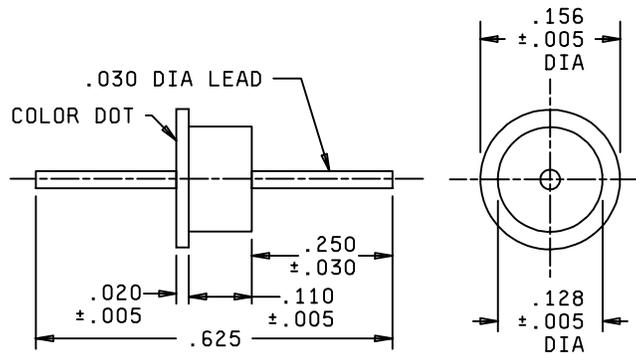
MILITARY SPECIFICATION SHEET

CAPACITORS, FIXED, CERAMIC DIELECTRIC (GENERAL PURPOSE),
(FEED-THRU)
STYLE CK99

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.
SEE TABLE II FOR SUBSTITUTION INFORMATION.



CIRCUIT DIAGRAM

Inch	mm	Inch	mm
.005	0.13	.128	3.25
.020	0.51	.156	3.96
.030	0.76	.250	6.35
.110	2.79	.625	15.88

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is $\pm .015$ (0.38 mm).

FIGURE 1. Style CK99 capacitors.

REQUIREMENTS

Design and construction:

Dimensions and configuration - See figure 1.

Case type - Feed-through (solder mount). Solder used internally shall have a minimum melting point of 280°C.

Capacitance value - See table I.

Capacitance tolerance - ± 20 percent (M).

Rated temperature - -55°C to +125°C.

Rated voltage: See table I.

TABLE I. Style CK99 characteristics.

PIN	Capacitance value	Rated voltage	Color dot
	pF	volts, dc	
CK99BW101M	100	200	Green
CK99BW501M	500	200	Brown
CK99BW122M	1,200	200	White
CK99BW272M	2,700	100	Red
CK99BW502M	5,000	50	Yellow

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

Dielectric:

Test voltage - 200 percent of dc rated voltage applied between the terminal and the mounting flange..

Body insulation: Not applicable.

Barometric pressure (reduced): In accordance with MIL-C-11015 and method 105 of MIL-STD-202, condition C (70,000 feet).

Test potential - 200 percent of dc rated voltage applied between the terminal and the mounting flange.

Insulation resistance (IR): In accordance with MIL-C-11015 and method 302 of MIL-STD-202, condition B, or rated voltage, whichever is less, 500 megohms, minimum, measured between the terminal and the mounting flange.

Dissipation factor (DF): 5.0 percent, maximum.

Shock (specified pulse): In accordance with MIL-C-11015 and method 213 of MIL-STD-202, condition A (50 g's).

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

Mounting: Capacitors shall be rigidly mounted by the body.

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

IR: 50 megohms, minimum.

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Salt spray (corrosion): In accordance with MIL-C-11015 and method 101 of MIL-STD-202, condition A.

Terminal strength: Not applicable.

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

IR - 50 megohms, minimum.

Δ Cap. - Within ± 10 percent of initial measurement.

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

Resistance to soldering heat: In accordance with MIL-C-11015.

Voltage-temperature limits: In accordance with MIL-C-11015 (symbol BW).

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

Test potential: 200 percent of rated voltage.

IR: 100 megohms, minimum (at 85°C);

250 megohms, minimum (at 25°C).

DF: 8.0 percent maximum (at 25°C).

Marking: Capacitors shall be marked as shown on figure 1. See table 1 for color code. The PIN, capacitance, voltage, and the manufacturer's code or symbol shall be marked on the package container.

Supersession data: For new design, units from Military Specification, MIL-PRF-28861/12 should be used as specified in table II.

TABLE II.

Inactive PIN	Superseding Specification Sheet	Superseding PIN
CK99BW101M	MIL-PRF-28861/12	M28861/12-012GB
CK99BW501M	MIL-PRF-28861/12	M28861/12-014GB
CK99BW122M	MIL-PRF-28861/12	M28861/12-016GB ^{1/}
CK99BW272M	MIL-PRF-28861/12	M28861/12-004GB
CK99BW502M	MIL-PRF-28861/12	M28861/12-006GB

^{1/} PIN CK99BW122M has a capacitance of 1,200 pF. PIN M28861/12-016GB has a capacitance of 1,000 pF.

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:
Air Force - 11
Navy - EC
DLA - CC

Preparing activity:
DLA - CC

(Project 5910-2069-14)