

INCH-POUND

MIL-C-11272/1E
4 February 2008
SUPERSEDING
MIL-C-11272/1D
7 February 2003

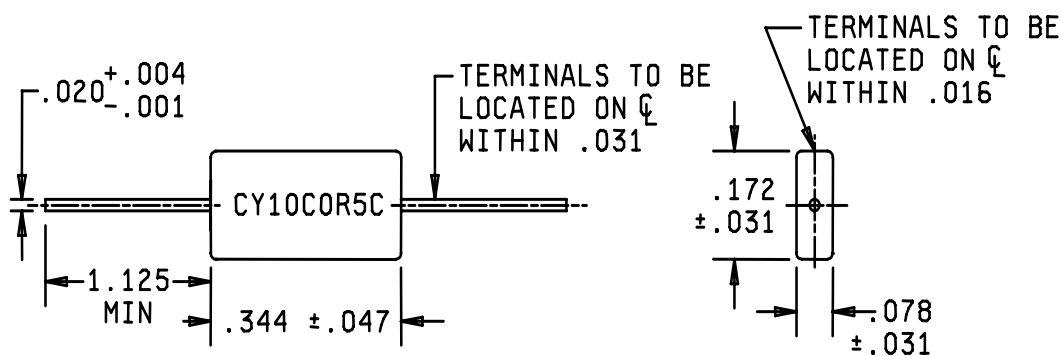
MILITARY SPECIFICATION SHEET

CAPACITORS, FIXED, GLASS DIELECTRIC
STYLE CY10

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 sheet and [MIL-C-11272](#).

INACTIVE FOR DESIGN AFTER
7 JAN 1970. USE [MIL-PRF-23269/1](#).



Inches	mm
.001	0.03
.004	0.10
.016	0.41
.020	0.51
.031	0.79
.047	1.19
.078	1.98
.172	4.37
.344	8.74
1.125	28.58

NOTES:

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

FIGURE 1. Style CY10 capacitors.

AMSC N/A

FSC 5910

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REQUIREMENTS:

Requirements: Requirements shall be in accordance with [MIL-C-11272](#), and as specified herein.

* Dimensions and configuration: See figure 1.

Capacitance: See table I.

TABLE I. Style CY10 Electrical Characteristics.

PIN <u>1/</u>	Capacitance	DC rated voltage	Capacitance tolerances available	PIN <u>1/</u>	Capacitance	DC rated voltage	Capacitance tolerances available
	pF	volts			pF	volts	
CY10C0R5C	0.5	500	C	CY10C240-	24	500	GJ
CY10C1R0C	1.0	500	C	CY10C270-	27	500	FGJ
CY10C1R5C	1.5	500	C	CY10C300-	30	500	FGJ
CY10C2R2-	2.2	500	CD	CY10C330-	33	500	FGJ
CY10C2R7C	2.7	500	C	CY10C360-	36	500	FGJ
CY10C3R0-	3.0	500	CD	CY10C390-	39	500	FGJ
CY10C3R3C	3.3	500	C	CY10C430-	43	500	FGJ
CY10C3R6-	3.6	500	CD	CY10C470-	47	500	FGJ
CY10C3R9C	3.9	500	C	CY10C510-	51	500	FGJ
CY10C4R3-	4.3	500	CD	CY10C560-	56	500	FGJ
CY10C4R7C	4.7	500	C	CY10C620-	62	500	FGJ
CY10C5R1C	5.1	500	C	CY10C680-	68	500	FGJ
CY10C5R6-	5.6	500	CJ	CY10C750-	75	500	FGJ
CY10C6R2-	6.2	500	CJ	CY10C820-	82	500	FGJ
CY10C6R8-	6.8	500	CJ	CY10C910-	91	500	FGJ
CY10C7R5-	7.5	500	CJ	CY10C101-	100	500	FGJ
CY10C8R2-	8.2	500	CJ	CY10C111-	110	500	FGJ
CY10C9R1-	9.1	500	CJ	CY10C121-	120	500	FGJ
CY10C100-	10	500	CJ	CY10C131-	130	500	FGJ
CY10C110-	11	500	CJ	CY10C151-	150	500	FGJ
CY10C120-	12	500	CJ	CY10C161-	160	500	FGJ
CY10C130-	13	500	GJ	CY10C181-	180	500	FGJ
CY10C150-	15	500	GJ	CY10C201-	200	500	FGJ
CY10C160-	16	500	GJ	CY10C221-	220	300	FGJ
CY10C180-	18	500	GJ	CY10C241-	240	300	FGJ
CY10C200-	20	500	GJ	CY10C271-	270	300	FGJ
CY10C220-	22	500	GJ	CY10C301-	300	300	FGJ

1/ Complete type designation will include an additional letter symbol to indicate capacitance tolerance, where applicable.

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Capacitance tolerance: C = ± 0.25 pF; D = ± 0.50 pF; F = $\pm 1\%$; G = $\pm 2\%$; J = $\pm 5\%$.

* DC rated voltage: 300 and 500 volts (see Table I).

Temperature range: -55°C to $+125^{\circ}\text{C}$.

* Life: In accordance with [MIL-C-11272](#) and the following:

* For qualification and group B continuation tests:

At 25°C :

Insulation resistance: 100,000 megohms minimum.

* Capacitance: Change not more than 0.5 percent of nominal value or 0.5 pF whichever is greater, from initial 25°C value.

Dissipation factor: Not to exceed 0.0025.

At 125°C :

Insulation resistance: 10,000 megohms minimum

Capacitance: Change not more than 0.5 percent of nominal value or 0.5 pF whichever is greater, from initial 125°C value.

Dissipation factor: Not to exceed 0.007.

For performance check:

Insulation resistance: 100,000 megohms minimum.

* Capacitance: Change not more than 0.5 percent of nominal value or 0.5 pF whichever is greater, from initial 25°C value.

Dissipation factor: Not to exceed 0.0025.

Temperature coefficient and capacitance drift: The temperature coefficient and capacitance drift shall be within the limits specified in table II.

TABLE II. Temperature coefficient and capacitance drift.

Temperature coefficient	Capacitance drift (-55° to $+125^{\circ}\text{C}$)
parts/million/ $^{\circ}\text{C}$ 140 ± 25	0.1 percent or 0.1 pF, whichever is greater.

* Referenced documents. In addition to [MIL-C-11272](#), this document also references the following:

[MIL-PRF-23269/1](#)

- * Changes from previous issue. The margins of this specification sheet are marked with asterisks 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 - 11
DLA - CC

Preparing activity:

DLA - CC

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Review activities:

Army - MI
Air Force - 99

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