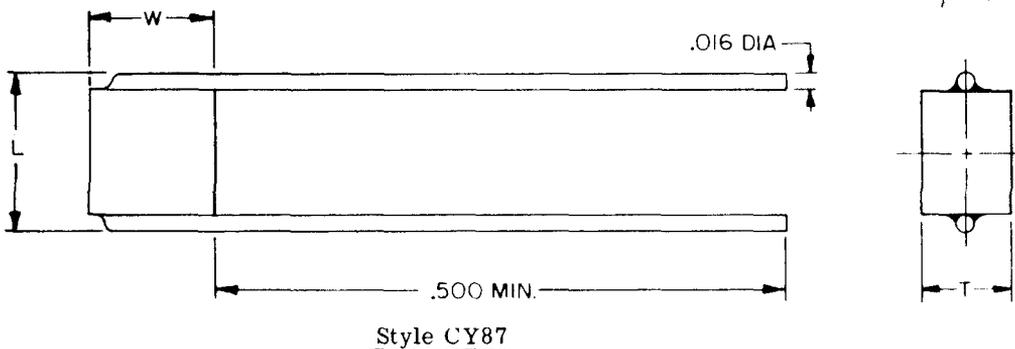
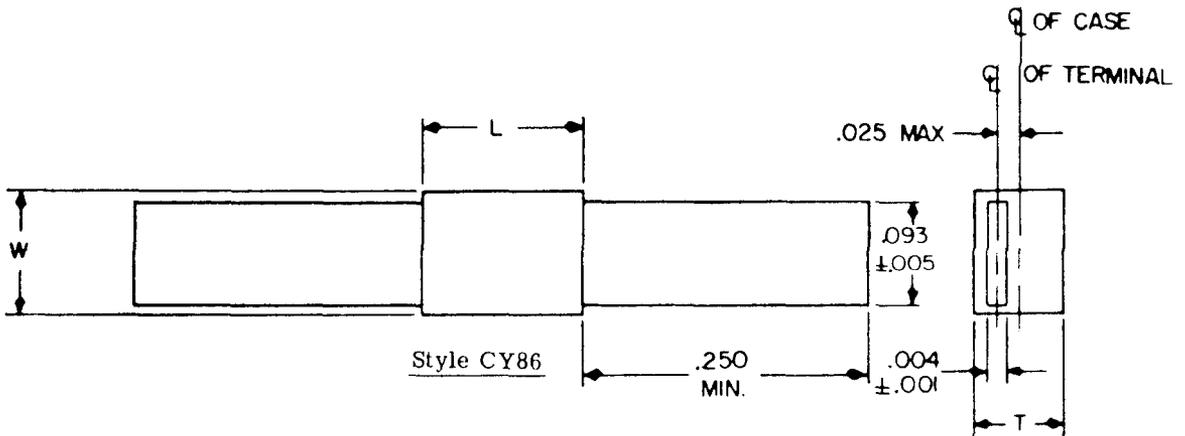
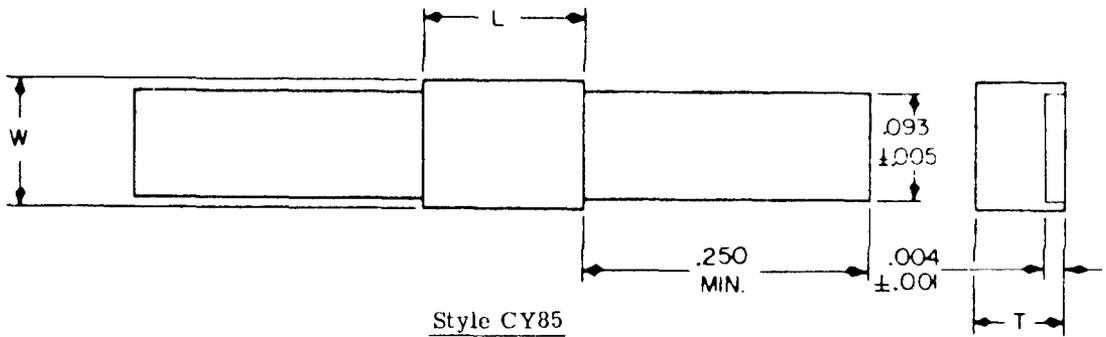


MILITARY SPECIFICATION SHEET

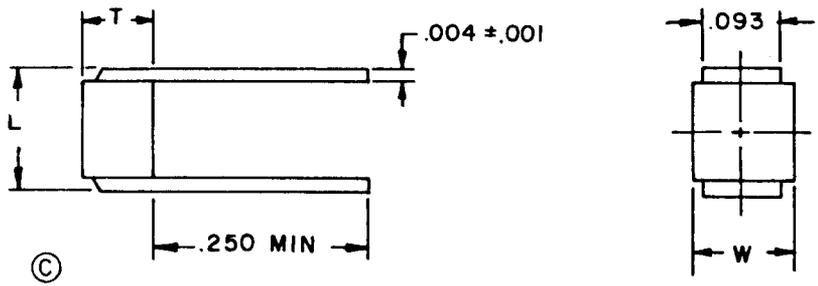
CAPACITORS. FIXED. GLASS DIELECTRIC.
 STYLES CY85, CY86, CY87, CY88, AND CY89

This specification is approved for use by all Departments and Agencies of the Department of Defense.

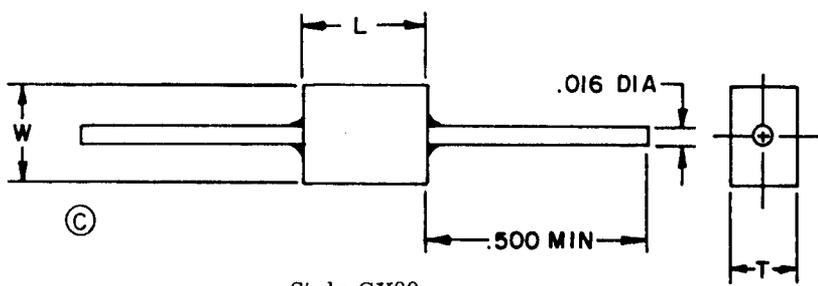
The complete requirements for procuring the capacitors described herein shall consist of this document and the latest issue of Specification MIL-C-11272.



© denotes changes



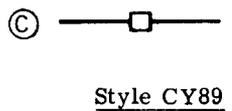
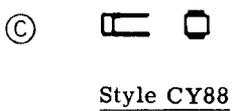
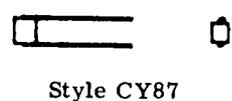
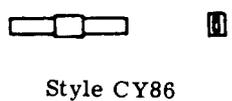
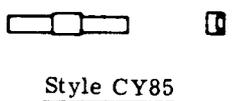
Style CY88



Style CY89

INCHES	MM	INCHES	MM
.001	.03	.093	2.36
.004	.10	.100	2.54
.005	.13	.110	2.79
.015	.38	.135	3.43
.016	.41	.250	6.35
.025	.64	.500	12.70
.060	1.52		

Style	L	W	T	
			Min	Max
			CY85	.135 ± .015
CY86	.135 ± .015	.110 ± .015	.060	.100
CY87	.135 ± .015	.110 ± .015	.060	.100
CY88	.135 ± .015	.110 ± .015	.060	.100
CY89	.135 ± .015	.110 ± .015	.060	.100



APPROX. SIZE

- NOTES:
1. Dimensions are in inches.
 2. Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.

TABLE I.

Type designation $\frac{1}{\mu}$	Capacitance	Rated voltage	Capacitance tolerance available
	<u>pF</u>	<u>Volts, dc</u>	
CY8-D0R1B	0.1	500	B
CY8-D0R2B	0.2		B
CY8-D0R3-	0.3		B, C
CY8-D0R4-	0.4		B, C
CY8-D0R5-	0.5		B, C, D
CY8-D0R6-	0.6		
CY8-D0R7-	0.7		
CY8-D0R8-	0.8		
CY8-D0R9-	0.9		
CY8-D1R0-	1.0		
CY8-D1R1-	1.1		
CY8-D1R2-	1.2		
CY8-D1R3-	1.3		
CY8-D1R4-	1.4		
CY8-D1R5-	1.5		
CY8-D1R6-	1.6		
CY8-D1R7-	1.7		
CY8-D1R8-	1.8		
CY8-D1R9-	1.9		
CY8-D2R0-	2.0		
CY8-D2R1-	2.1		
CY8-D2R2-	2.2		
CY8-D2R4-	2.4		
CY8-D2R7-	2.7		
CY8-D3R0-	3.0		
CY8-D3R3-	3.3		
CY8-D3R6-	3.6		
CY8-D3R9-	3.9		
CY8-D4R3-	4.3		
CY8-D4R7-	4.7		
CY8-D5R1-	5.1		
CY8-D5R6-	5.6		
CY8-D6R2-	6.2		

See footnote at end of table.

TABLE I. - Continued

Type designation ^{1/}	Capacitance	Rated voltage	Capacitance tolerance available
	μF	<u>Volts, dc</u>	
CY8-D6R8-	6.8	500	B, C, J, K, M
CY8-D7R5-	7.5	↓	↓
CY8-D8R2-	8.2	↓	↓
CY8-D9R1-	9.1	↓	↓
CY8-D100-	10	↓	F, G, J, K, M
CY8-D110-	11	↓	↓
CY8-D120-	12	↓	↓
CY8-D130-	13	↓	↓
CY8-D150-	15	↓	↓
CY8-D160-	16	↓	↓
CY8-D180-	18	↓	↓
CY8-D200-	20	↓	↓
CY8-D220-	22	↓	↓
CY8-D240-	24	↓	↓
CY8-D270-	27	↓	↓
CY8-D300-	30	↓	↓
CY8-D330-	33	↓	↓
CY8-D360-	36	↓	↓
CY8-D390-	39	↓	↓
CY8-D430-	43	↓	↓
CY8-D470-	47	↓	↓
CY8-D510-	51	↓	↓
CY8-D560-	56	↓	↓
CY8-D620-	62	↓	↓
CY8-D680-	68	↓	↓
CY8-D750-	75	↓	↓
CY8-D820-	82	↓	↓
CY8-D910-	91	↓	↓
CY8-D101-	100	↓	↓
CY8-D111-	110	300	
CY8-D121-	120	↓	
CY8-D131-	130	↓	
CY8-D151-	150	↓	
CY8-D161-	160	↓	
CY8-D181-	180	↓	
CY8-D201-	200	↓	
CY8-D221-	220	200	
CY8-D241-	240	↓	
CY8-D271-	270	↓	
CY8-D301-	300	↓	
CY8-D331-	330	↓	
CY8-D361-	360	↓	
CY8-D391-	390	↓	
CY8-D431-	430	↓	
CY8-D471-	470	↓	
CY8-D511-	510	100	
CY8-D561-	560	↓	
CY8-D621-	620	↓	
CY8-D681-	680	50	
CY8-D751-	750	↓	
CY8-D821-	820	↓	
CY8-D911-	910	↓	
CY8-D102-	1000	↓	↓

^{1/} Complete type designation will include an additional digit to indicate the style, and an additional letter symbol to indicate the capacitance tolerance, where applicable.

REQUIREMENTS

Design and construction:

Dimensions and configuration: See figure and table I.

Case type: Multi-layer, unencapsulated, monolithic.

Material - Porcelain.

Terminals: Styles CY85 and CY86 - Silver leads attached with solder, if used, with melting temperature less than 200°C. Style CY87-26 gauge wire, solderable as to MIL-STD-202E, method 208C.

Inspection conditions: All visual examinations shall be performed using a stereo microscope having a minimum magnification of 20 power.

Capacitance (Cap.) value: See table I.

Cap. tolerance: See table I.

Rated voltage: See table I, characteristic D.

Operating temperature range: -55°C to +125°C.

Insulation resistance (IR):

At +25°C: 10⁶ megohms, minimum (for 0.1 pF thru 470 pF).

10⁵ megohms, minimum (for 510 pF thru 1,000 pF).

At +125°C: 10⁵ megohms, minimum (for 0.1 pF thru 470 pF).

10⁴ megohms, minimum (for 510 pF thru 1,000 pF).

Quality factor: 10,000. 1 MHz -0 +100 kHz.

Life:

At +25°C and +125°C:

IR - Not less than initial requirement.

Cap. - Change not more than 0.2 percent or 0.2 pF, whichever is greater, from the nominal value.

Temperature coefficient and capacitance drift. See table II.

TABLE II. Temperature coefficient and capacitance drift.

Temperature coefficient	Capacitance drift (-55° to +25°C)
Parts/million/°C 90 ±20	0.1 percent or 0.1 pF, whichever is greater

NOTE: These capacitors are intended for use in RF solid-state circuitry up to and including 25 gigahertz, and cannot be replaced in the field.

Preparing activity:
Air Force - 11

Agent:
DSA - ES

(Project 5910-F238)