

Mica Capacitors **Standard Dipped**

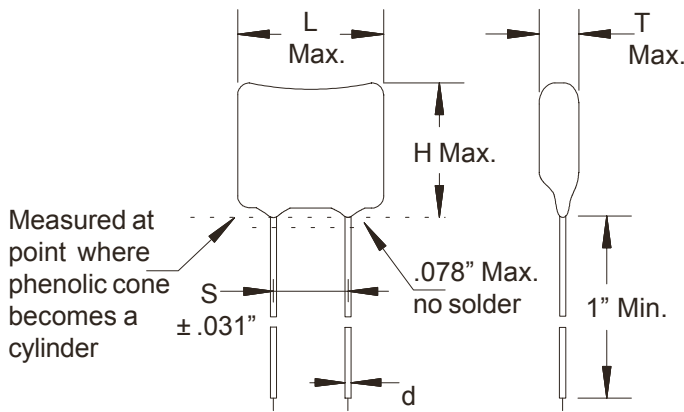
Types CD10, D10, CD15, CD19, CD30, CD42, CDV19, CDV30



Stability and mica go hand-in-hand when you need to count on stable capacitance over a wide temperature range. CDE's standard dipped silvered mica capacitors are the first choice for timing and close tolerance applications. These standard types are widely available through distribution

Highlights

- MIL-C-5 military styles available
- Reel packaging available
- High temperature – up to +150 °C
- Dimensions meet EIA RS153B specification
- 100,000 V/μs dV/dt pulse capability minimum
- Non-flammable units that meet IEC 695-2-2 are available



Specifications

- Capacitance Range:** 1 pF to 91,000 pF
- Voltage Range:** 100 Vdc to 2,500 Vdc
- Capacitance Tolerance:** ±1/2 pF (D), ±1 pF (C), ±1/2% (E), ±1% (F), ±2% (G), ±5% (J)
- Temperature Range:** –55 °C to +125 °C (O) –55 °C to +150 °C (P)*
- Dielectric Strength Test:** 200% of rated voltage
- *P temperature range available for types CD10, CD15, CD19, CD30, CD42 and CDA15.

Ratings

Cap (pF)	Volts (Vdc)	Catalog Part Number	L in (mm)	H in (mm)	T in (mm)	S in (mm)	d in (mm)
1	500	CD10CD010D03	0.36 (9.1)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
1	500	CD15CD010D03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
2	500	CD10CD020D03	0.36 (9.1)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
2	500	CD15CD020D03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
3	500	CD10CD030D03	0.36 (9.1)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
3	500	CD15CD030D03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
4	500	CD15CD040D03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
5	500	CD10CD050D03	0.36 (9.1)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
5	500	CD15CD050D03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
5	1,000	CDV19CF050D03	0.64 (16.3)	0.50 (12.7)	0.19 (4.8)	0.344 (8.7)	0.032 (.8)
6	500	CD10CD060D03	0.36 (9.1)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
6	500	CD15CD060D03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
6	1,000	CDV19CF060D03	0.64 (16.3)	0.50 (12.7)	0.19 (4.8)	0.344 (8.7)	0.032 (.8)
7	500	CD10CD070D03	0.36 (9.1)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
7	500	CD15CD070D03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
7	1,000	CDV19CF070D03	0.64 (16.3)	0.50 (12.7)	0.19 (4.8)	0.344 (8.7)	0.032 (.8)
8	500	CD10CD080D03	0.36 (9.1)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
8	500	CD15CD080D03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
8	1,000	CDV19CF080D03	0.64 (16.3)	0.50 (12.7)	0.19 (4.8)	0.344 (8.7)	0.032 (.8)
10	500	CD10CD100J03	0.36 (9.1)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
10	500	CD15CD100J03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
10	1,000	CDV19CF100J03	0.64 (16.3)	0.50 (12.7)	0.19 (4.8)	0.344 (8.7)	0.032 (.8)
12	500	CD10CD120J03	0.36 (9.1)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
12	500	CD15CD120J03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
12	1,000	CDV19CF120J03	0.64 (16.3)	0.50 (12.7)	0.19 (4.8)	0.344 (8.7)	0.032 (.8)

Cap (pF)	Volts (Vdc)	Catalog Part Number	L in (mm)	H in (mm)	T in (mm)	S in (mm)	d in (mm)
15	500	CD10CD150J03	0.36 (9.1)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
15	500	CD15CD150J03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
15	1000	CDV19CF150J03	0.64 (16.3)	0.50 (12.7)	0.19 (4.8)	0.344 (8.7)	0.032 (.8)
18	500	CD10CD180J03	0.36 (9.1)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
18	500	CD15CD180J03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
18	1000	CDV19CF180J03	0.64 (16.3)	0.50 (12.7)	0.19 (4.8)	0.344 (8.7)	0.032 (.8)
20	500	CD10ED200J03	0.36 (9.1)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
20	500	CD15ED200J03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
20	1000	CDV19EF200J03	0.64 (16.3)	0.50 (12.7)	0.19 (4.8)	0.344 (8.7)	0.032 (.8)
22	500	CD10ED220J03	0.36 (9.1)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
22	500	CD15ED220J03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
22	1000	CDV19EF220J03	0.64 (16.3)	0.50 (12.7)	0.19 (4.8)	0.344 (8.7)	0.032 (.8)
24	500	CD10ED240J03	0.36 (9.1)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
24	500	CD15ED240J03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
24	1000	CDV19EF240J03	0.64 (16.3)	0.50 (12.7)	0.19 (4.8)	0.344 (8.7)	0.032 (.8)
24	1,500	CDV30EH240J03	0.77 (19.6)	0.85 (21.6)	0.25 (6.4)	0.438 (11.1)	0.040 (1.0)
24	2000	CDV30EJ240J03	0.77 (19.6)	0.86 (21.8)	0.25 (6.4)	0.438 (11.1)	0.040 (1.0)
24	2500	CDV30EK240J03	0.78 (19.8)	0.86 (21.8)	0.25 (6.4)	0.438 (11.1)	0.040 (1.0)
27	500	CD10ED270J03	0.37 (9.4)	0.33 (8.4)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)
27	500	CD15ED270J03	0.45 (11.4)	0.36 (9.1)	0.17 (4.3)	0.234 (5.9)	0.025 (.6)
27	1000	CDV19EF270J03	0.64 (16.3)	0.50 (12.7)	0.19 (4.8)	0.344 (8.7)	0.032 (.8)
27	1,500	CDV30EH270J03	0.77 (19.6)	0.85 (21.6)	0.25 (6.4)	0.438 (11.1)	0.040 (1.0)
27	2000	CDV30EJ270J03	0.77 (19.6)	0.86 (21.8)	0.25 (6.4)	0.438 (11.1)	0.040 (1.0)
27	2500	CDV30EK270J03	0.78 (19.8)	0.86 (21.8)	0.25 (6.4)	0.438 (11.1)	0.040 (1.0)
30	500	CD10ED300J03	0.37 (9.4)	0.34 (8.6)	0.19 (4.8)	0.141 (3.6)	0.016 (.4)

Ordering Information Dipped Mica Capacitors

Ordering Information

Order by complete part number as below. For other options, write your requirements on your purchase order or request for quotation.

Radial-Leaded Silvered Mica Capacitors (Except D7, D10*)

CD15	C	D	100	J	O	3
Series	Characteristic Code	Voltage (Vdc)	Capacitance (pF)	Capacitance Tolerance	Temperature Range	Vibration Grade
	Y = 50 Vdc A = 100 Vdc C = 300 Vdc D = 500 Vdc	F = 1000 Vdc H = 1500 Vdc J = 2000 Vdc K = 2500 Vdc	010 = 1 pF 1.5 = 1.5 pF 361 = 360 pF 122 = 1200 pF		O = -55 °C to +125 °C P = -55 °C to +150 °C	

Characteristics			
Code	Temp. Coeff. ppm/ °C	Capacitance Drift	Standard Cap. Range
C	-200 to +200	±(0.5% +0.1 pF)	1-18 pF
E	-20 to +100	±(0.1% +0.1 pF)	20-82 pF
F	0 to +70	±(0.05% +0.1 pF)	91 pF and up

Vibration Grade		
No.	MIL-STD-202	Vibration Condition (Hz)
1	Method 201	10 to 55
3	Method 204 Condition D	10 to 2,000

Standard vibration grade is 3, the more severe equipment

Options Available

- ◆ Non-flammable units per IEC 695-2-2 are available for standard dipped capacitors. Specify IEC 695-2-2 on your order
- ◆ Tape and reeling, specify per next page.
- ◆ "P" temperature range available for CD10, CD15, CD19, CD30m CD42, CDA15
- ◆ For MIL-C-5 capacitors, see below.

Capacitance Tolerance

Tol. Code	Tolerance	Capacitance Range
C	±1 pF	1- 9 pF
D	±1/2 pF	1-100 pF
E	±1/2 %	100 pF and up
F	±1 %	50 pF and up
G	±2 %	25 pF and up
H	±3 %	18 pF and up
J	±5 %	10 pF and up

Standard tolerance is ±½ pF for less than 10 pF and ±5% for 10 pF and up

MIL-C-5 Capacitors

Capacitors are available marked and manufactured to the requirements of standard MIL-C-5. To order the MIL-C-5 part number, change the Catalog Number by replacing

the CDE type with the MIL-C-5 Style Number using the table below. Example: Change CD15ED470J03 to CM05ED470J03.

CDE Type Number	MIL-C-5 Style Number
CD10	CM04
CD15	CM05
CD19	CM06
CD30	CM07

The following ratings have no MIL-C-5 equivalents:

Type CD10: 2, 3, 4, 50, 250 and 400 pF

Type CD15: 2, 3, 4, 50, 250, 430 and higher pF

Type CD19: 390 and lower pF, 2,500 pF, and 5000 and higher pF

Type CD30: 5,000 and lower pF, 33,000 and higher pF

* Order Type D7 and D10 using the Catalog Numbers shown in the ratings tables.