

CORNELL DUBILIER Multilayer Clad SMT RF Capacitors



MIN, MCM HIGH CURRENT SERIES

Types MCM and MIN SMT clad multilayer RF capacitors are top performers for high power applications requiring low inductance at high frequencies and can operate at temperatures up to 200°C and voltages to 1000VDC.

Thermal Spreading, robust natural materials and a CTE compatible with FR4 make these capacitors an excellent choice to replace more expensive porcelain capacitors.

Common Features:

- 200°C rated with no voltage derating
- Low ESR for RF power applications
- Wave solderable
- CTE ≈ 18
- No cracking / delaminating
- Nonmagnetic for minimal RF loss
- Very low ESL for excellent by-pass action
- Available on T&R
- Ultra stable - no change with (t), (V) and (f)
- Exact capacitance values ±0.5pF up to 1000VDC

CDE CORNELL DUBILIER MIN SERIES

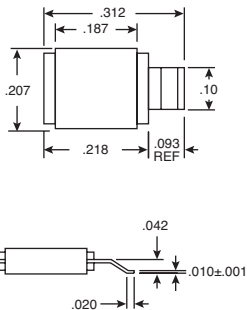


RoHS Compliant

Specifications:

- Voltage Rating: 300VDC
- Temperature Range: -55°C to +200°C with no voltage derating
- Dielectric Strength: 200% of rated voltage for 5 seconds
- Insulation Resistance: 1000MΩ - μF Need not exceed 100,000MΩ at 25°C
- Typical Thickness: .065 - .125 (±0.015)
- Wave solderable
- Typical ESR <10mΩ @ 100 MHz (100pF)

DIMENSIONS: in.



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CDE Part No.	VDC	Capacitance (pF)	Tolerance (±)	Dielectric Material	Price Each			
						1	10	25	50
5981-MIN02-3.3D-F	MIN02-002C3R3D-F	300	3.3	0.5 pF	Teflon	4.27	3.57	3.17	2.61
5981-MIN02-4.7D-F	MIN02-002C4R7D-F	300	4.7	0.5 pF	Teflon	3.42	2.81	2.55	2.10
5981-MIN02-6.8D-F	MIN02-002C6R8D-F	300	6.8	0.5 pF	Teflon	2.48	2.05	1.82	1.50
5981-MIN02-10J-F	MIN02-002CC100J-F	300	10	5%	Mica	2.24	1.90	1.82	1.70
5981-MIN02-12J-F	MIN02-002CC120J-F	300	12	5%	Mica	2.53	2.09	1.86	1.52
5981-MIN02-15J-F	MIN02-002CC150J-F	300	15	5%	Mica	1.66	1.41	1.34	1.26
5981-MIN02-17J-F	MIN02-002CC170J-F	300	17	5%	Mica	1.84	1.55	1.49	1.39
5981-MIN02-18J-F	MIN02-002CC180J-F	300	18	5%	Mica	1.66	1.41	1.34	1.26
5981-MIN02-20J-F	MIN02-002CC200J-F	300	20	5%	Mica	1.66	1.41	1.34	1.26
5981-MIN02-22J-F	MIN02-002DC220J-F	300	22	5%	Mica	1.80	1.53	1.40	1.30
5981-MIN02-24J-F	MIN02-002DC240J-F	300	24	5%	Mica	1.66	1.41	1.34	1.26
5981-MIN02-25J-F	MIN02-002DC250J-F	300	25	5%	Mica	1.84	1.55	1.49	1.39
5981-MIN02-27J-F	MIN02-002DC270J-F	300	27	5%	Mica	1.66	1.41	1.34	1.26
5981-MIN02-30J-F	MIN02-002DC300J-F	300	30	5%	Mica	1.84	1.55	1.49	1.39
5981-MIN02-32J-F	MIN02-002DC320J-F	300	32	5%	Mica	1.84	1.55	1.49	1.39
5981-MIN02-33J-F	MIN02-002DC330J-F	300	33	5%	Mica	1.66	1.41	1.34	1.26
5981-MIN02-35J-F	MIN02-002DC350J-F	300	35	5%	Mica	1.66	1.41	1.34	1.26
5981-MIN02-36J-F	MIN02-002DC360J-F	300	36	5%	Mica	1.66	1.41	1.34	1.26
5981-MIN02-39J-F	MIN02-002DC390J-F	300	39	5%	Mica	3.28	2.72	2.41	1.98
5981-MIN02-43J-F	MIN02-002DC430J-F	300	43	5%	Mica	1.66	1.41	1.34	1.26
5981-MIN02-47J-F	MIN02-002DC470J-F	300	47	5%	Mica	1.80	1.53	1.40	1.30
5981-MIN02-50J-F	MIN02-002DC500J-F	300	50	5%	Mica	1.66	1.41	1.34	1.26
5981-MIN02-70J-F	MIN02-002EC700J-F	300	70	5%	Mica	4.23	3.52	3.13	2.58
5981-MIN02-82J-F	MIN02-002EC820J-F	300	82	5%	Mica	3.55	2.94	2.62	2.15
5981-MIN02-100J-F	MIN02-002EC101J-F	300	100	5%	Mica	3.23	2.68	2.39	1.96
5981-MIN02-350J-F	MIN02-002EC351J-F	300	350	5%	Mica	7.79	6.49	5.77	4.76

Engineering Design Kit

MOUSER STOCK NO.	Description	Voltage	Value (pF)	Price Each	
				1	10
5981-MIN300VKIT1	5 each of 13 values	300	3.3-150	49.55	44.88

CDE CORNELL DUBILIER MCM SERIES

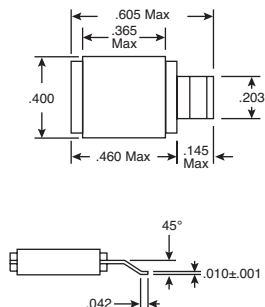


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- Dielectric Strength: 200% of rated voltage for 5 seconds
- Insulation Resistance: 1000MΩ - μF Need not exceed 100,000MΩ at 25°C
- Typical Thickness: .095 - .125 (±0.015)
- Wave solderable
- Typical I_{RMES} >20 Amps @ 100 MHz

DIMENSIONS: in.



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MOUSER STOCK NO.	CDE Part No.	VDC	Capacitance (pF)	Tolerance (±)	Dielectric Material	Price Each			
						1	10	25	50
5981-MCM01-1500J-F	MCM01-009EC152J-F	300	1500	5%	Mica	13.46	11.24	9.96	8.23
5981-MCM01-3.3D-F	MCM01-009D3R3D-F	500	3.3	0.5 pF	Teflon	5.89	5.03	4.94	4.09
5981-MCM01-4.7D-F	MCM01-009D4R7D-F	500	4.7	0.5 pF	Teflon	5.36	4.58	4.50	3.73
5981-MCM01-10J-F	MCM01-009CD100J-F	500	10	5%	Mica	5.45	4.56	4.05	3.33
5981-MCM01-15J-F	MCM01-009CD150J-F	500	15	5%	Mica	5.45	4.56	4.05	3.33
5981-MCM01-22J-F	MCM01-009DD220J-F	500	22	5%	Mica	2.79	2.40	2.27	2.13
5981-MCM01-47J-F	MCM01-009DD470J-F	500	47	5%	Mica	2.91	2.52	2.34	2.18
5981-MCM01-100J-F	MCM01-009ED101J-F	500	100	5%	Mica	2.89	2.50	2.33	2.16
5981-MCM01-150J-F	MCM01-009ED151J-F	500	150	5%	Mica	2.64	2.28	2.12	1.97
5981-MCM01-220J-F	MCM01-009ED221J-F	500	220	5%	Mica	2.91	2.52	2.34	2.18
5981-MCM01-330J-F	MCM01-009ED331J-F	500	330	5%	Mica	6.21	5.17	4.60	3.79
5981-MCM01-470J-F	MCM01-009ED471J-F	500	470	5%	Mica	4.52	4.19	3.88	3.66
5981-MCM01-560J-F	MCM01-009ED561J-F	500	560	5%	Mica	4.29	3.59	3.18	2.63
5981-MCM01-750J-F	MCM01-009ED751J-F	500	750	5%	Mica	4.29	3.59	3.18	2.63
5981-MCM01-1000J-F	MCM01-009ED102J-F	500	1000	5%	Mica	5.08	4.34	3.97	3.66
5981-MCM01-1200J-F	MCM01-009ED122J-F	500	1200	5%	Mica	6.46	5.40	4.79	3.95
5981-MCM01-F3.3D-F	MCM01-009F3R3D-F	1000	3.3	0.5 pF	Teflon	4.87	4.07	3.61	2.98
5981-MCM01-F4.7D-F	MCM01-009F4R7D-F	1000	4.7	0.5 pF	Teflon	4.87	4.07	3.61	2.98
5981-MCM01-F6.8D-F	MCM01-009F6R8D-F	1000	6.8	0.5 pF	Teflon	4.87	4.07	3.61	2.98
5981-MCM01-CF100J-F	MCM01-009CF100J-F	1000	10	5%	Mica	6.79	5.68	5.02	4.14
5981-MCM01-DF22J-F	MCM01-009DF220J-F	1000	22	5%	Mica	2.69	2.25	2.00	1.65
5981-MCM01-EF150J-F	MCM01-009EF151J-F	1000	150	5%	Mica	7.59	6.33	5.63	4.63
5981-MCM01-EF330J-F	MCM01-009EF331J-F	1000	330	5%	Mica	8.65	7.23	6.41	5.29
5981-MCM01-EF470J-F	MCM01-009EF471J-F	1000	470	5%	Mica	7.86	6.57	5.83	4.80

Engineering Design Kit

MOUSER STOCK NO.	Description	Voltage	Value (pF)	Price Each	
				1	10
598-MCM500VKIT2	5 each of 10 values	500	10-1000	65.98	59.77
598-MCM1000VKIT3	5 each of 7 values	1000	100-750	80.95	73.33

