

# CORNELL DUBILIER RF MICA Chip Capacitors

## MCH SERIES: HIGH VOLTAGE MAGNETIC

**Features:**

- No thermal cracking
- FR4 compatible and wave solderable
- Extremely high Q above 50MHz
- Excellent for tuning and impedance matching

**Applications:**

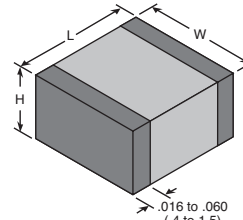
- RF Power Amplifiers
- MRI Generators
- Transmitters



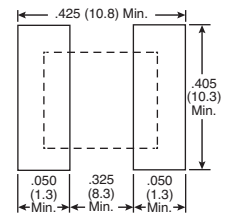
RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CDE Type	Volt (DC)	Value (pF)	Tol. ±	Dimensions: in.			Price Each		
					L	W	H	1	10	100
598-MCH38FM100D	MCH38FM100D	4000	10	5%	0.38	0.38	0.08	35.90	32.31	28.85
598-MCH38FM220J	MCH38FM220J	4000	22	5%	0.38	0.38	0.08	40.34	36.29	32.40
598-MCH38FM470J	MCH38FM470J	4000	47	5%	0.38	0.38	0.12	36.85	33.15	29.62
598-MCH38FM680J	MCH38FM680J	4000	68	5%	0.38	0.38	0.12	47.88	43.08	38.46
598-MCH38FM101J	MCH38FM101J	4000	100	5%	0.38	0.38	0.16	47.37	42.61	38.09
598-MCH38FK271J	MCH38FK271J	2500	270	5%	0.38	0.38	0.16	50.95	45.85	40.92
598-MCH38FK331J	MCH38FK331J	2500	330	5%	0.38	0.38	0.16	54.41	48.96	43.71
598-MCH38FK391J	MCH38FK391J	2500	390	5%	0.38	0.38	0.16	57.43	51.68	46.13
598-MCH38FK471J	MCH38FK471J	2500	470	5%	0.38	0.38	0.16	61.90	55.69	49.73
598-MCH38FK561J	MCH38FK561J	2500	560	5%	0.38	0.38	0.24	66.52	59.84	53.45
598-MCH38FK681J	MCH38FK681J	2500	680	5%	0.38	0.38	0.24	73.02	65.69	58.71



**Soldering Pattern**



**Engineering Design Kits**

MOUSER STOCK NO.	CDE Type	Description	Cap Range (pF)	Volt (DC)	Price Each	
					1	2
598-MCH4000VKIT10	MCH4000VKIT10	Multilayer High RF Power Capacitors, Kit includes 5 each of 10 values (50 capacitors)	10 -220	4000	571.61	524.42
598-MCH2500VKIT8	MCH2500VKIT8	Multilayer High RF Power Capacitors, Kit includes 5 each of 8 values (40 capacitors)	270-1000	2500	655.16	601.07

DIMENSIONS: in. (mm)

## MC SERIES: HIGH POWER HV RF CHIP CAPACITORS

**Specifications:**

- Temperature range: -55°C to +125°C
- Insulation resistance: 100GΩ min.
- Pulse handling: dV/dt of 20,000V/ps
- Tight tolerances available
- Typical I<sub>RM</sub>S > 8 Amps @ 100MHz
- Voltage: 100VDC, 500VDC, 1000VDC
- Capacitance Range: .5pF to 2200pF



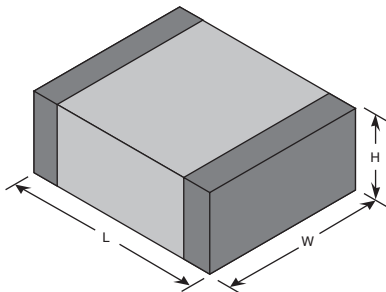
RoHS Compliant

**Features:**

- Low impedance to beyond 1GHz
- Near-zero capacitance change in all environments
- Withstands 200% rated voltage for up to 5 seconds
- Very High Q
- FREE from cracking / delaminating
- FR4 Compatible and wire solderable

**Applications:**

- CATV
- Flight Radio
- RF and Microwave
- Resonators
- Lasers



**MC08 Series**

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CDE Type MC	Volt (DC)	Value (pF)	Tol. ±	Case Size: in.			Price Each		
					L	W	H	1	100	500
598-MC08CA020D-F	MC08CA020D-F	100	2	.5pF	.079	.049	.055	1.22	.866	.663
598-MC08CA030D-F	MC08CA030D-F	100	3	.5pF	.079	.049	.055	1.13	.804	.726
598-08-100V5.0-F	MC08CA050D-F	100	5	.5pF	.079	.049	.055	1.13	.804	.771
598-08-100V10-F	MC08CA100D-F	100	10	.5pF	.079	.049	.055	1.20	.856	.588
598-08-100V15-F	MC08EA150J-F	100	15	5%	.079	.049	.055	1.13	.80	.658
598-08-100V22-F	MC08EA220J-F	100	22	5%	.079	.049	.055	1.13	.804	.726
598-08-100V27-F	MC08EA270J-F	100	27	5%	.079	.049	.055	1.22	.866	.663

**MC12 Series**

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CDE Type MC	Volt (DC)	Value (pF)	Tol. ±	Case Size: in.			Price Each		
					L	W	H	1	100	500
598-12-100V100-F	MC12FA101J-F	100	100	5%	.126	.098	.079	1.35	.95	.86
598-MC12FA151J-F	MC12FA151J-F	100	150	5%	.126	.098	.079	1.46	1.03	.928
598-12-100V220-F	MC12FA221J-F	100	220	5%	.126	.098	.079	1.57	1.10	.99
598-MC12FA241J-F	MC12FA241J-F	100	240	5%	.126	.098	.079	1.57	1.10	.99
598-12-500V5.0-F	MC12CD050D-F	500	5	.5pF	.126	.098	.079	1.53	1.07	.92
598-12-500V10-F	MC12CD100D-F	500	10	.5pF	.126	.098	.079	1.35	.948	.87
598-12-500V15-F	MC12ED150J-F	500	15	5%	.126	.098	.079	1.46	1.03	.928
598-MC12FD330J-F	MC12FD330J-F	500	33	5%	.126	.098	.079	1.04	.95	.928
598-12-500V47-F	MC12FD470J-F	500	47	5%	.126	.098	.079	1.39	.978	.89
598-12-500V100-F	MC12FD101J-F	500	100	5%	.126	.098	.079	1.76	1.25	1.09

**MC18 Series**

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CDE Type MC	Volt (DC)	Value (pF)	Tol. ±	Case Size: in.			Price Each		
					L	W	H	1	100	500
598-18-500V100-F	MC18FD101J-F	500	100	5%	.177	.126	.079	1.76	1.25	1.10
598-MC18FD121J-F	MC18FD121J-F	500	120	5%	.177	.126	.079	1.76	1.25	1.09
598-18-500V220-F	MC18FD221J-F	500	220	5%	.177	.126	.079	1.98	1.42	1.25
598-MC18FD301J-F	MC18FD301J-F	500	300	5%	.177	.126	.079	2.38	1.65	1.41
598-18-500V330-F	MC18FD331J-F	500	330	5%	.177	.126	.079	2.23	1.55	1.42
598-MC18FD391J-F	MC18FD391J-F	500	390	5%	.177	.126	.079	2.62	1.81	1.56

**MC22 Series**

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CDE Type MC	Volt (DC)	Value (pF)	Tol. ±	Case Size: in.			Price Each		
					L	W	H	1	100	500
598-MC22FA102J-F	MC22FA102J-F	100	1000	5%	.224	.197	.079	3.36	2.35	2.07
598-22-100V2K-F	MC22FA202J-F	100	2000	5%	.224	.197	.079	4.69	3.30	2.79
598-MC22FD501J-F	MC22FD501J-F	500	500	5%	.224	.197	.079	3.14	2.19	1.94
598-MC22FD751J-F	MC22FD751J-F	500	750	5%	.224	.197	.079	3.67	2.55	2.19
598-22-500V1000-F	MC22FD102J-F	500	1000	5%	.224	.197	.079	3.78	2.67	2.27
598-22-1000V470-F	MC22FF471J-F	1000	470	5%	.224	.197	.157	3.39	2.37	2.16
598-22-1000V1000-F	MC22FF102J-F	1000	1000	5%	.224	.197	.157	4.56	3.20	2.95
598-22-1000V1500-F	MC22FF152J-F	1000	1500	5%	.224	.197	.157	5.54	3.89	3.57