



Surface Mount Multilayer Ceramic Chip Capacitor Kits for High Frequency Applications



FEATURES

- Body size 0402, 0603, 0805, 0505, 1111
- 15 pieces of each part
- Ultra-stable dielectric material
- Lead (Pb)-free terminations code “X”
- Reliable Noble Metal Electrode (NME) system
- Made with a combination of design, materials and tight process control to achieve very high field reliability
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS*
Available

HALOGEN FREE
GREEN
(5-2008)
Available

APPLICATIONS

- Broadband wireless communication
- Satellite communication
- WiFi (802.11) and WiMax (802.16)
- VoIP networks and cellular base stations
- Subscriber based wireless devices
- MRI coils and generators
- RF instruments
- Lasers, CATV, UHF / microwave RF power amplifiers
- Filter networks, timing circuits
- Mixers, oscillators impedance matching networks



0402 and 0603 Available

See how our QUADs handle the power!

www.vishay.com/videos/capacitorsconnectors/rf-quad-series-mlccs-demo-lower-temperature-vs-competition

ELECTRICAL SPECIFICATIONS AND DIMENSIONS (refer to the appropriate datasheet)		
BODY SIZE	SERIES	DATASHEET
0402	VJ HIFREQ Series	www.vishay.com/doc?45071
0603		
0805		
0505	QUAD HIFREQ Series	www.vishay.com/doc?45221
1111		

ORDERING INFORMATION			
PART NUMBER	BODY SIZE	MINIMUM CAPACITANCE VALUE (pF)	MAXIMUM CAPACITANCE VALUE (pF)
VJ0402HIFRQ1KIT	0402	1.0	82
VJ0402HIFRQ2KIT		0.1	0.9
VJ0603HIFRQ1KIT	0603	1.0	47
VJ0603HIFRQ2KIT		56	470
VJ0603HIFRQ3KIT		0.1	0.9
VJ0805HIFRQ1KIT	0805	1.0	82
VJ0805HIFRQ2KIT		100	1500
VJ0505QUARF1KIT	0505	1.0	8.2
VJ0505QUARF2KIT		10	100
VJ1111QUARF1KIT	1111	1.0	8.2
VJ1111QUARF2KIT		10	82
VJ1111QUARF3KIT		100	1000



VJ HIFREQ SERIES DESIGN KITS: 0402 BODY SIZE

VJ0402HIFRQ1KIT		
CAPACITANCE (pF)	TOLERANCE	VOLTAGE (V)
1.0	± 0.10 pF	200
1.2	± 0.10 pF	200
1.5	± 0.10 pF	200
1.8	± 0.10 pF	200
2.0	± 0.10 pF	200
3.0	± 0.10 pF	200
3.3	± 0.10 pF	200
4.7	± 0.25 pF	200
5.6	± 0.25 pF	200
6.8	± 0.25 pF	200
8.2	± 0.25 pF	200
12	± 5 %	200
15	± 5 %	200
18	± 5 %	200
20	± 5 %	200
22	± 5 %	200
39	± 5 %	50
47	± 5 %	50
56	± 5 %	50
68	± 5 %	25
82	± 5 %	25

VJ0402HIFRQ2KIT		
CAPACITANCE (pF)	TOLERANCE (pF)	VOLTAGE (V)
0.1	0.05	200
0.2	0.05	200
0.3	0.05	200
0.4	0.05	200
0.5	0.05	200
0.6	0.05	200
0.7	0.05	200
0.8	0.05	200
0.9	0.05	200

QUAD HIFREQ SERIES DESIGN KITS: 0505 BODY SIZE

VJ0505QUARF1KIT		
CAPACITANCE (pF)	TOLERANCE (pF)	VOLTAGE (V)
1.0	± 0.10	250
1.2	± 0.10	250
1.5	± 0.10	250
1.8	± 0.10	250
2.0	± 0.10	250
2.2	± 0.10	250
2.4	± 0.10	250
2.7	± 0.10	250
3.0	± 0.10	250
3.3	± 0.10	250
3.9	± 0.10	250
4.7	± 0.25	250
5.6	± 0.25	250
6.8	± 0.25	250
8.2	± 0.25	250

VJ0505QUARF2KIT		
CAPACITANCE (pF)	TOLERANCE (%)	VOLTAGE (V)
10	± 5	250
12	± 5	250
15	± 5	250
18	± 5	250
20	± 5	250
22	± 5	250
24	± 5	250
27	± 5	250
30	± 5	250
33	± 5	250
39	± 5	250
47	± 5	250
56	± 5	250
68	± 5	250
82	± 5	200
100	± 5	200



VJ HIFREQ SERIES DESIGN KITS: 0603 BODY SIZE

VJ0603HIFRQ1KIT		
CAPACITANCE (pF)	TOLERANCE	VOLTAGE (V)
1.0	± 0.10 pF	250
1.2	± 0.10 pF	250
1.5	± 0.10 pF	250
1.8	± 0.10 pF	250
2.0	± 0.10 pF	250
2.2	± 0.10 pF	250
2.4	± 0.10 pF	250
2.7	± 0.10 pF	250
3.0	± 0.10 pF	250
3.3	± 0.10 pF	250
3.9	± 0.25 pF	250
4.7	± 0.25 pF	250
5.6	± 0.25 pF	250
6.8	± 0.25 pF	250
8.2	± 0.25 pF	250
10	± 5 %	250
12	± 5 %	250
15	± 5 %	250
18	± 5 %	250
20	± 5 %	250
22	± 5 %	250
27	± 5 %	250
30	± 5 %	250
33	± 5 %	250
39	± 5 %	250
47	± 5 %	250

VJ0603HIFRQ2KIT		
CAPACITANCE (pF)	TOLERANCE (%)	VOLTAGE (V)
56	± 5	200
68	± 5	200
82	± 5	200
100	± 5	200
120	± 5	100
150	± 5	100
180	± 5	50
200	± 5	50
220	± 5	50
270	± 5	50
300	± 5	50
330	± 5	50
390	± 5	25
470	± 5	25

VJ0603HIFRQ3KIT		
CAPACITANCE (pF)	TOLERANCE (pF)	VOLTAGE (V)
0.1	0.05	250
0.2	0.05	250
0.3	0.05	250
0.4	0.05	250
0.5	0.05	250
0.6	0.05	250
0.7	0.05	250
0.8	0.05	250
0.9	0.05	250



VJ HIFREQ SERIES DESIGN KITS: 0805 BODY SIZE

VJ0805HIFRQ1KIT		
CAPACITANCE (pF)	TOLERANCE	VOLTAGE (V)
1.0	± 0.10 pF	250
1.2	± 0.10 pF	250
1.5	± 0.10 pF	250
1.8	± 0.10 pF	250
2.0	± 0.10 pF	250
2.2	± 0.10 pF	250
2.4	± 0.10 pF	250
2.7	± 0.10 pF	250
3.0	± 0.10 pF	250
3.3	± 0.10 pF	250
3.9	± 0.25 pF	250
4.7	± 0.25 pF	250
5.6	± 0.25 pF	250
6.8	± 0.25 pF	250
8.2	± 0.25 pF	250
10	± 5 %	250
12	± 5 %	250
15	± 5 %	250
18	± 5 %	250
20	± 5 %	250
22	± 5 %	250
24	± 5 %	250
27	± 5 %	250
30	± 5 %	250
33	± 5 %	250
39	± 5 %	250
47	± 5 %	250
56	± 5 %	250
68	± 5 %	250
82	± 5 %	250

VJ0805HIFRQ2KIT		
CAPACITANCE (pF)	TOLERANCE (%)	VOLTAGE (V)
100	± 5	250
120	± 5	250
150	± 5	250
180	± 5	250
200	± 5	250
220	± 5	250
240	± 5	250
270	± 5	250
300	± 5	250
330	± 5	250
390	± 5	200
470	± 5	100
560	± 5	100
680	± 5	100
820	± 5	50
1000	± 5	50
1200	± 5	25
1500	± 5	25



QUAD HIFREQ SERIES DESIGN KITS: 1111 BODY SIZE

VJ1111QUARF1KIT		
CAPACITANCE (pF)	TOLERANCE (pF)	VOLTAGE (V)
1.0	± 0.10	1500
1.2	± 0.10	1500
1.5	± 0.10	1500
1.8	± 0.10	1500
2.0	± 0.10	1500
2.2	± 0.10	1500
2.4	± 0.10	1500
2.7	± 0.10	1500
3.0	± 0.10	1500
3.3	± 0.25	1500
3.9	± 0.25	1500
4.7	± 0.25	1500
5.6	± 0.25	1500
6.8	± 0.25	1500
8.2	± 0.25	1500

VJ1111QUARF3KIT		
CAPACITANCE (pF)	TOLERANCE (%)	VOLTAGE (V)
100	± 5	1500
120	± 5	1000
150	± 5	1000
180	± 5	1000
200	± 5	630
220	± 5	630
240	± 5	630
270	± 5	630
300	± 5	630
330	± 5	630
390	± 5	630
470	± 5	630
560	± 5	300
680	± 5	300
820	± 5	300
1000	± 5	300

VJ1111QUARF2KIT		
CAPACITANCE (pF)	TOLERANCE (%)	VOLTAGE (V)
10	± 5	1500
12	± 5	1500
15	± 5	1500
18	± 5	1500
20	± 5	1500
22	± 5	1500
24	± 5	1500
27	± 5	1500
30	± 5	1500
33	± 5	1500
39	± 5	1500
47	± 5	1500
56	± 5	1500
68	± 5	1500
82	± 5	1500