



Surface Mount Multilayer Ceramic Chip Capacitor Kits for High Temperature, 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"
- High frequency / high temperature 175 °C / 200 °C
- 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
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)
Available

APPLICATIONS

- RF and microwave
- Broadband communication
- Satellite communication
- Base stations
- Medical instrumentation and test
- Military devices (radar, communication, etc.)
- Wireless devices

LINKS TO ADDITIONAL RESOURCES



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 HT Series	www.vishay.com/doc?45239
0603		
0805		
0505		
1111		

ORDERING INFORMATION

PART NUMBER	BODY SIZE	MINIMUM CAPACITANCE VALUE (pF)	MAXIMUM CAPACITANCE VALUE (pF)
VJ0402HIFRQ1K1THT	0402	1.0	47
VJ0402HIFRQ2K1THT		0.1	0.9
VJ0603HIFRQ1K1THT	0603	1.0	47
VJ0603HIFRQ2K1THT		56	270
VJ0603HIFRQ3K1THT		0.1	0.9
VJ0805HIFRQ1K1THT	0805	1.0	82
VJ0805HIFRQ2K1THT		100	1500
VJ0505QUARF1K1THT	0505	1.0	8.2
VJ0505QUARF2K1THT		10	100
VJ1111QUARF1K1THT	1111	1.0	8.2
VJ1111QUARF2K1THT		10	82
VJ1111QUARF3K1THT		100	1000

**VJ HIFREQ HT SERIES DESIGN KITS: 0402 BODY SIZE**

VJ0402HIFRQ1KITHT		
CAPACITANCE (pF)	TOLERANCE	VOLTAGE (V)
1.0	± 0.10 pF	100
1.2	± 0.10 pF	100
1.5	± 0.10 pF	100
1.8	± 0.10 pF	100
2.0	± 0.10 pF	100
2.7	± 0.10 pF	100
3.0	± 0.10 pF	50
3.3	± 0.10 pF	50
4.7	± 0.25 pF	50
5.6	± 0.25 pF	50
6.2	± 0.25 pF	50
6.8	± 0.25 pF	50
7.5	± 0.25 pF	50
8.2	± 0.25 pF	50
12	± 5 %	50
15	± 5 %	50
18	± 5 %	25
20	± 5 %	25
22	± 5 %	25
27	± 5 %	25
39	± 5 %	16
47	± 5 %	16

VJ0402HIFRQ2KITHT		
CAPACITANCE (pF)	TOLERANCE (pF)	VOLTAGE (V)
0.1	± 0.05	100
0.2	± 0.05	100
0.3	± 0.05	100
0.4	± 0.05	100
0.5	± 0.05	100
0.6	± 0.05	100
0.7	± 0.05	100
0.8	± 0.05	100
0.9	± 0.05	100

QUAD HIFREQ HT SERIES DESIGN KITS: 0505 BODY SIZE

VJ0505QUARF1KITHT		
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

VJ0505QUARF2KITHT		
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	200
68	± 5	200
82	± 5	150
100	± 5	150

**VJ HIFREQ HT SERIES DESIGN KITS: 0603 BODY SIZE**

VJ0603HIFRQ1KITHT		
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
2.2	± 0.10 pF	200
2.4	± 0.10 pF	200
2.7	± 0.10 pF	200
3.0	± 0.10 pF	200
3.3	± 0.10 pF	200
3.9	± 0.25 pF	200
4.7	± 0.25 pF	200
5.6	± 0.25 pF	200
6.2	± 0.25 pF	200
6.8	± 0.25 pF	200
7.5	± 0.25 pF	200
8.2	± 0.25 pF	200
9.1	± 0.25 pF	200
10	± 5 %	100
12	± 5 %	100
15	± 5 %	100
18	± 5 %	100
20	± 5 %	100
22	± 5 %	100
27	± 5 %	100
30	± 5 %	100
33	± 5 %	100
39	± 5 %	100
47	± 5 %	100

VJ0603HIFRQ2KITHT		
CAPACITANCE (pF)	TOLERANCE (%)	VOLTAGE (V)
56	± 5	50
68	± 5	50
82	± 5	50
100	± 5	50
120	± 5	25
150	± 5	25
180	± 5	16
200	± 5	16
220	± 5	16
270	± 5	16

VJ0603HIFRQ3KITHT		
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

**VJ HIFREQ HT SERIES DESIGN KITS: 0805 BODY SIZE**

VJ0805HIFRQ1KITHT		
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 %	200
82	± 5 %	100

VJ0805HIFRQ2KITHT		
CAPACITANCE (pF)	TOLERANCE (%)	VOLTAGE (V)
100	± 5	100
120	± 5	100
150	± 5	100
180	± 5	100
200	± 5	100
220	± 5	100
240	± 5	100
270	± 5	50
300	± 5	50
330	± 5	50
390	± 5	50
470	± 5	50
560	± 5	25
680	± 5	25
820	± 5	16
1000	± 5	16

**QUAD HIFREQ HT SERIES DESIGN KITS: 1111 BODY SIZE**

VJ1111QUARF1KITHT		
CAPACITANCE (pF)	TOLERANCE (pF)	VOLTAGE (V)
1.0	± 0.10	500
1.2	± 0.10	500
1.5	± 0.10	500
1.8	± 0.10	500
2.0	± 0.10	500
2.2	± 0.10	500
2.4	± 0.10	500
2.7	± 0.10	500
3.0	± 0.10	500
3.3	± 0.25	500
3.9	± 0.25	500
4.7	± 0.25	500
5.6	± 0.25	500
6.8	± 0.25	500
8.2	± 0.25	500

VJ1111QUARF3KITHT		
CAPACITANCE (pF)	TOLERANCE (%)	VOLTAGE (V)
100	± 5	500
120	± 5	500
150	± 5	500
180	± 5	500
200	± 5	300
220	± 5	300
240	± 5	300
270	± 5	300
300	± 5	300
330	± 5	300
390	± 5	300
470	± 5	300
560	± 5	100
680	± 5	100
820	± 5	100
1000	± 5	100

VJ1111QUARF2KITHT		
CAPACITANCE (pF)	TOLERANCE (%)	VOLTAGE (V)
10	± 5	500
12	± 5	500
15	± 5	500
18	± 5	500
20	± 5	500
22	± 5	500
24	± 5	500
27	± 5	500
30	± 5	500
33	± 5	500
39	± 5	500
47	± 5	500
56	± 5	500
68	± 5	500
82	± 5	500