



Design a KEMET Ceramic Capacitor into Your Next Project



KEMET currently offers seven distinct Ceramic Engineering Kits which are designed to provide active solutions to the passive component requirements characterized in professional OEM engineering design, prototyping, university lab research, and by hobbyist users. Each kit contains a selection of popular capacitor values and a KEMET catalog which outlines drawings, dimensions, marking format, recommended mounting pad dimensions, and ordering information.

Our current ceramic engineering kit offering includes the following categories:

- CER ENG KIT 03 - 0603 Case Size SMT Capacitors
- CER ENG KIT 04 - 0805 Case Size SMT Capacitors
- CER ENG KIT 05 - 1206 Case Size SMT Capacitors
- CER ENG KIT 06 - 0402 Case Size SMT Capacitors
- NEW** CER ENG KIT 07 - High Capacitance Value SMT Capacitors
- NEW** CER ENG KIT 08 - High Voltage Capacitors (Includes both SMT and leaded components)
- NEW** CER ENG KIT 09 - Open Mode/Fail Safe SMT Capacitors

Each of our Ceramic Engineering Kits contains an assortment of 10-20 popular capacitor values. Quantities of each part type will range from 20 to 100pcs based upon kit type. Each part type will be provided either in bulk or by carrier tape and will be clearly labeled with a KEMET ordering code for ease of identification. Please refer to the appended tables for a complete listing of part types and quantities offered with each of our engineering kits.

Experience the quality and performance of KEMET ceramic capacitors. Order one of KEMET's Ceramic Engineering Kits and see for yourself how well our quality components perform in even the most challenging applications.

F3218G 6/06

Kit Part Number: CER ENG KIT 03
0603 (EIA) Case Size SMT Capacitors - 100 pcs. per Part Number

KEMET Part Number	EIA Size Code	Capacitance pF	Tolerance	Voltage	Dielectric
C0603C159C5GAC	0603	1.5	±0.25pF	50	C0G
C0603C100C5GAC	0603	10	±0.25pF	50	C0G
C0603C220C5GAC	0603	22	±0.25pF	50	C0G
C0603C330D5GAC	0603	33	±0.5pF	50	C0G
C0603C470D5GAC	0603	47	±0.5pF	50	C0G
C0603C101J5GAC	0603	100	±5%	50	C0G
C0603C221J5GAC	0603	220	±5%	50	C0G
C0603C331J5GAC	0603	330	±5%	50	C0G
C0603C471J5GAC	0603	470	±5%	50	C0G
C0603C102K5RAC	0603	1000	±10%	50	X7R
C0603C222K5RAC	0603	2200	±10%	50	X7R
C0603C332K5RAC	0603	3300	±10%	50	X7R
C0603C472K5RAC	0603	4700	±10%	50	X7R
C0603C103K5RAC	0603	10,000	±10%	50	X7R
C0603C223K5RAC	0603	22,000	±10%	50	X7R
C0603C333K5RAC	0603	33,000	±10%	50	X7R
C0603C473K5RAC	0603	47,000	±10%	50	X7R
C0603C104K5RAC	0603	100,000	±10%	50	X7R
C0603C224K4RAC	0603	220,000	±10%	16	X7R
C0603C105K8PAC	0603	1,000,000	±10%	10	X5R

Kit Part Number: CER ENG KIT 04
0805 (EIA) Case Size SMT Capacitors - 100 pcs. per Part Number

KEMET Part Number	EIA Size Code	Capacitance pF	Tolerance	Voltage	Dielectric
C0805C100C2GAC	0805	10	±0.25pF	200	C0G
C0805C220C1GAC	0805	22	±0.25pF	100	C0G
C0805C470D1GAC	0805	47	±0.5pF	100	C0G
C0805C101J1GAC	0805	100	±5%	100	C0G
C0805C221J1GAC	0805	220	±5%	100	C0G
C0805C471J1GAC	0805	470	±5%	100	C0G
C0805C102J5GAC	0805	1000	±5%	50	C0G
C0805C222K1RAC	0805	2200	±10%	100	X7R
C0805C472K1RAC	0805	4700	±10%	100	X7R
C0805C103K1RAC	0805	10,000	±10%	100	X7R
C0805C223K1RAC	0805	22,000	±10%	100	X7R
C0805C333K1RAC	0805	33,000	±10%	100	X7R
C0805C473K1RAC	0805	47,000	±10%	100	X7R
C0805C104K5RAC	0805	100,000	±10%	50	X7R
C0805C224K3RAC	0805	220,000	±10%	25	X7R
C0805C474K3RAC	0805	470,000	±10%	25	X7R
C0805C105K4RAC	0805	1,000,000	±10%	16	X7R
C0805C225K8PAC	0805	2,200,000	±10%	10	X5R
C0805C475K8PAC	0805	4,700,000	±10%	10	X5R
C0805C106K9PAC	0805	10,000,000	±10%	6.3	X5R

Ceramic Engineering Kits

Kit Part Number: CER ENG KIT 05

1206 (EIA) Case Size SMT Capacitors - 100 pcs. per Part Number

KEMET Part Number	EIA Size Code	Capacitance pF	Tolerance	Voltage	Dielectric
C1206C100C2GAC	1206	10	±0.25pF	200	C0G
C1206C220C2GAC	1206	22	±0.25pF	200	C0G
C1206C330D2GAC	1206	33	±0.5pF	200	C0G
C1206C470D2GAC	1206	47	±0.5pF	200	C0G
C1206C101J1GAC	1206	100	±5%	100	C0G
C1206C221J1GAC	1206	220	±5%	100	C0G
C1206C471J1GAC	1206	470	±5%	100	C0G
C1206C102J1GAC	1206	1000	±5%	100	C0G
C1206C222J1GAC	1206	2200	±5%	100	C0G
C1206C472J5GAC	1206	4700	±5%	50	C0G
C1206C103K5RAC	1206	10,000	±10%	50	X7R
C1206C223K5RAC	1206	22,000	±10%	50	X7R
C1206C473K5RAC	1206	47,000	±10%	50	X7R
C1206C104K5RAC	1206	100,000	±10%	50	X7R
C1206C224K5RAC	1206	220,000	±10%	50	X7R
C1206C474K3RAC	1206	470,000	±10%	25	X7R
C1206C105K3RAC	1206	1,000,000	±10%	25	X7R
C1206C225K4RAC	1206	2,200,000	±10%	16	X7R
C1206C475K3PAC	1206	4,700,000	±10%	25	X5R
C1206C106K4PAC	1206	10,000,000	±10%	16	X5R

Kit Part Number: CER ENG KIT 06

0402 (EIA) Case Size SMT Capacitors - 100 pcs. per Part Number

KEMET Part Number	EIA Size Code	Capacitance pF	Tolerance	Voltage	Dielectric
C0402C109C5GAC	0402	1.0	±0.25pF	50	C0G
C0402C229C5GAC	0402	2.2	±0.25pF	50	C0G
C0402C339C5GAC	0402	3.3	±0.25pF	50	C0G
C0402C100C5GAC	0402	10	±0.25pF	50	C0G
C0402C150C5GAC	0402	15	±0.25pF	50	C0G
C0402C220C5GAC	0402	22	±0.25pF	50	C0G
C0402C330D5GAC	0402	33	±0.5pF	50	C0G
C0402C470D5GAC	0402	47	±0.5pF	50	C0G
C0402C680J5GAC	0402	68	±5%	50	C0G
C0402C750J5GAC	0402	75	±5%	50	C0G
C0402C101J5GAC	0402	100	±5%	50	C0G
C0402C221K5RAC	0402	220	±10%	50	X7R
C0402C331K5RAC	0402	330	±10%	50	X7R
C0402C561K5RAC	0402	560	±10%	50	X7R
C0402C102K5RAC	0402	1000	±10%	50	X7R
C0402C222K5RAC	0402	2200	±10%	50	X7R
C0402C562K5RAC	0402	5600	±10%	50	X7R
C0402C103K5RAC	0402	10,000	±10%	50	X7R
C0402C473K8PAC	0402	47,000	±10%	10	X5R
C0402C104K8PAC	0402	100,000	±10%	10	X5R

Kit Part Number: CER ENG KIT 07**High Capacitance Value SMT Capacitors - 20 pcs. per Part Number**

KEMET Part Number	EIA Size Code	Capacitance μ F	Tolerance	Voltage	Dielectric
C0402C104K4RAC	0402	0.1	$\pm 10\%$	16	X7R
C0402C105K9PAC	0402	1.0	$\pm 10\%$	6.3	X5R
C0603C103K2RAC	0603	0.01	$\pm 10\%$	200	X7R
C0603C104K5RAC	0603	0.1	$\pm 10\%$	50	X7R
C0603C105K4PAC	0603	1.0	$\pm 10\%$	16	X5R
C0603C225K9PAC	0603	2.2	$\pm 10\%$	6.3	X5R
C0603C475K9PAC	0603	4.7	$\pm 10\%$	6.3	X5R
C0805C124K1RAC	0805	0.12	$\pm 10\%$	100	X7R
C0805C224K5RAC	0805	0.22	$\pm 10\%$	50	X7R
C0805C225K4RAC	0805	2.2	$\pm 10\%$	16	X7R
C0805C475K4PAC	0805	4.7	$\pm 10\%$	16	X5R
C0805C106K9PAC	0805	10.0	$\pm 10\%$	6.3	X5R
C1206C684K5RAC	1206	0.68	$\pm 10\%$	50	X7R
C1206C105K3RAC	1206	1.0	$\pm 10\%$	25	X7R
C1206C475K3PAC	1206	4.7	$\pm 10\%$	25	X5R
C1206C106K8RAC	1206	10.0	$\pm 10\%$	10	X7R
C1206C106K4PAC	1206	10.0	$\pm 10\%$	16	X5R
C1206C226K9PAC	1206	22.0	$\pm 10\%$	6.3	X5R
C1210C226K4PAC	1210	22.0	$\pm 10\%$	16	X5R
C1210C476M9PAC	1210	47.0	$\pm 20\%$	6.3	X5R

Kit Part Number: CER ENG KIT 08**High Voltage Capacitors - 20 pcs. per Part Number**

KEMET Part Number	EIA Size Code	Termination Profile	Capacitance pF	Tolerance	Voltage	Dielectric
C330C102KGR5TA	Refer to F3101 Catalog for case size dimensions.	Leaded	1000	$\pm 10\%$	2000	X7R
C330C102JHR5TA		Leaded	1000	$\pm 5\%$	3000	X7R
C330C102JDG5TA		Leaded	1000	$\pm 5\%$	1000	C0G
C330C101JHG5TA		Leaded	100	$\pm 5\%$	3000	C0G
C322C473KCR5TA		Leaded	47000	$\pm 10\%$	500	X7R
C322C103JDR5TA		Leaded	10000	$\pm 5\%$	1000	X7R
C322C102KFR5TA		Leaded	1000	$\pm 10\%$	1500	X7R
C322C101JCG5TA		Leaded	100	$\pm 5\%$	500	C0G
C322C471JDG5TA		Leaded	470	$\pm 5\%$	1000	C0G
C0805C101JCGAC	0805	SMT	100	$\pm 5\%$	500	C0G
C1206C472KCRAC	1206	SMT	4700	$\pm 10\%$	500	X7R
C1206C103KCRAC	1206	SMT	10000	$\pm 10\%$	500	X7R
C1206C471JFRAC	1206	SMT	470	$\pm 5\%$	1500	X7R
C1206C331KCGAC	1206	SMT	330	$\pm 10\%$	500	C0G
C1210C103JDRAC	1210	SMT	10000	$\pm 5\%$	1000	X7R
C1808C102KGRAC	1808	SMT	1000	$\pm 10\%$	2000	X7R
C1812C103KCRAC	1812	SMT	10000	$\pm 10\%$	500	X7R
C1812C473KCRAC	1812	SMT	47000	$\pm 10\%$	500	X7R
C1812C102KGRAC	1812	SMT	1000	$\pm 10\%$	2000	X7R
C2225C104KCRAC	2225	SMT	100000	$\pm 10\%$	500	X7R

Kit Part Number: CER ENG KIT 09**Open Mode/Fail Safe SMT Capacitors - 20 pcs. per Part Number**

KEMET Part Number	EIA Size Code	Capacitance μ F	Tolerance	Voltage	Dielectric
C0805F103K5RAC	0805	0.01	$\pm 10\%$	50	X7R
C0805F223K1RAC	0805	0.022	$\pm 10\%$	100	X7R
C0805F473K5RAC	0805	0.047	$\pm 10\%$	50	X7R
C0805F104K5RAC	0805	0.10	$\pm 10\%$	50	X7R
C0805F224K5RAC	0805	0.22	$\pm 10\%$	50	X7R
C0805F474K3RAC	0805	0.47	$\pm 10\%$	25	X7R
C1206F104K1RAC	1206	0.10	$\pm 10\%$	100	X7R
C1206F224K5RAC	1206	0.22	$\pm 10\%$	50	X7R
C1206F105K5RAC	1206	1.0	$\pm 10\%$	50	X7R
C1210F105K5RAC	1206	1.0	$\pm 10\%$	50	X7R