



Surface mount MLCC Capacitor X-Reference Guide

Chip Case Size/Style Cross Reference Chart

HEC	C0201	C0402	C0603	C0805	C1206	C1210	C1808	C1812	C1825	C2220	C2225
<b>ATC</b>	ATC0201	ATC 0402	ATC 0603	ATC 0805	ATC 1206	ATC 1210	ATC 1808	ATC 1812	ATC 1825	ATC 2220	ATC 2225
<b>AVX</b>	0201	0402	0603	0805	1206	1210	1808	1812	1825	2220	2225
<b>Cal Chip</b>	GMC02	GMC04	GMC10	GMC21	GMC31	GMC32		GMC43	GMC45	GMC55	GMC57
<b>Epcos</b>		B37920	B37930 B37931 B37540 B37932	B37940 B37941 B37541 B37942	B37871 B37872 B37472 B37873	B37949 B37950 B37550 B37951		B37953 B37954		B37956 B37957	
<b>Johanson</b>	R05	R07	R14	R15	R18	S41	R29	S43	S49	S47	S48
<b>Kemet</b>	C0201	C0402	C0603	C0805	C1206	C1210	C1808	C1812	C1825	C2220	C2225
<b>Murata</b>	GRM03	GRM15	GRM18	GRM21	GRM31	GRM32	GRM42	GRM43	GRM 43-2	GRM55	GRM57
<b>NIC</b>	NMC0201	NMC 0402	NMC 0603	NMC 0805	NMC 1206	NMC 1210	NMC 1808	NMC 1812	NMC 1825	NMC 2220	NMC 2225
<b>Novacap</b>	0201	0402	0603	0805	1206	1210	1808	1812	1825	2220	2225
<b>Panasonic</b>		ECJ0	ECJ1	ECJ2	ECJ3	ECJ4					
<b>Philips</b>	0201	0402	0603	0805	1206	1210	1808	1812	1825	2220	2225
<b>Phycomp</b>	0201	0402	0603	0805	1206	1210	1808	1812			
<b>Presidio</b>	0201	0402	0603	0805	1206	1210	1808	1812	1825	2220	2225
<b>Rohm</b>	3	15	18	21	31	32		43			
<b>Samsung</b>	CL03	CL05	CL10	CL21	CL31	CL32	CL42	CL43		CL55	
<b>Syfer</b>	0201	0402	0603	0805	1206	1210	1808	1812	1825	2220	2225
<b>TDK</b>	C0603	C1005	C1608	C2012	C3216	C3225		C4532		C5750	
<b>Taiyo Yuden</b>	63	105	107	212	316	325		432		550	
<b>Venkel</b>	C0201	C0402	C0603	C0805	C1206	C1210	C1808	C1812	C1825	C2220	C2225
<b>Vishey/ Vitramon</b>	VJ0201	VJ0402	VJ0603	VJ0805	VJ1206	VJ1210	VJ1808	VJ1812	VJ1825	VJ2220	VJ2225
<b>Yageo</b>		CC0402	CC0603	CC0805	CC1206	CC1210	CC1812				
<b>Walsin</b>	0201	0402	0603	0805	1206	1210	1808	1812			



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**HEC: C0805X474K050T**

C	0805	X	474	K	050	T
Cap Series	EIA Size	Dielectric	Capacitance	Tolerance	Voltage	Packaging
	0201 0402 0603 0805 1206 1210 1808 1812 1825 2220 2225	B:X5R C:X7E E:Y5U G:COG N:NPO S:X6S X:X7R Y:Y5V	1st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B: 0.10pF C: 0.25pF D: 0.5pF G: 2% J: 5% K: 10% M: 20% Z:80-20%	004:4V 007:6.3V 010:10V 016:16V 025:25V 035:35V 050:50V 101:100V 201:200V 251:250V 351:350V 501:500V 631:630V 102:1KV 202:2kV 302:3KV 502:5KV 602:6KV	T: Tape & Reel (7") B: Bulk

**ATC: ATC0805X7R474KL2AT**

**HEC: C0805X474K050T**

ATC	0805	X7R	474	K	L	2	A	T
ATC Style	Size	Dielectric	Capacitance	Tolerance	Termination	Voltage	Marking	Packaging
	0201 0402 0603 0805 1206 1210 1808 1812 1825 2220 2225	NPO X7R Z5U Y5V	1st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B:±0.10pF C:±0.25pF D:±0.5pF F:±1% G:±2% J: ± 5% K: ± 10% M: ± 20% Z:80-20% P:100-0%	L: Ni Barrier	1:25v 2:50v 3:100v 5:500v 6:1Kv	A:Unmarked S: Marked	B: Bulk R: 13" Reel T: Tape & Reel (7")



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**AVX: 08055C474KAT2A**

**HEC: C0805X474K050T**

0805	5	C	474	K	A	T	2	A
Size	Voltage	Dielectric	Capacitance	Tolerance	Failure Rate	Termination	Packaging	Special Code
0201 0402 0603 0805 1206 1210 1808 1812 1825 2220 2225	Z:10V Y:16V 3:25V 5:50V 1:100V 2:200V V:250V 7:500V C:600V A:1KV G:2KV H:3KV J:4KV K:5KV P:250 Telco	A:NPO C:X7R D:X5R E:Z5U G:Y5V	1st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B:±0.10pF C:±0.25pF D:±0.5pF F:±1% G:±2% J: ± 5% K: ± 10% M: ± 20% Z:80-20% P:100-0%	A:NA	T:NI/Tin Plate 1: Pd/Ag 7: Ni/Au Plate	2:7" Reel 4:13" Reel 7: Bulk Cassette 9: Bulk	A:Standard

**CAL CHIP: GMC21X7R474K50NT**

**HEC: C0805X474K050T**

GMC	21	X7R	474	K	50	N	T	
Cap Style	Size	Dielectric	Capacitance	Tolerance	Voltage	Termination	Packaging	Marking
	02:0201 04:0402 10:0603 21:0805 31:1206 32:1210 43:1812 45:1825 55:2220 57:2225	CG(NPO) X7R Z5U Y5V	1st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B:±0.10pF C:±0.25pF D:±0.5pF F:±1% G:±2% J: ± 5% K: ± 10% M: ± 20% Z:80-20% P:100-0%	16:16v 25:25v 50:50v 100:100v 200:200v	N: Ni Barrier	B: Bulk E: Plastic T: Paper Tape	M:Marked None: Unmarked



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**Epcos: B37941K5474K062**

**HEC: C0805X474K050T**

B37941	K	5	474	K	0	62
Cap Style/Size/Dielectric	Termination	Voltage	Capacitance	Tolerance	Internal Code	Packaging
B37920: 0402(NPO) B37930: 0603(NPO) B37931: 0603(X7R) B37540: 0603(X8R) B37932: 0603(Z5U/Y5U) B37940: 0805(NPO) B37941: 0805(X7R) B37541: 0805(X8R) B37942: 0805(Z5U/Y5U) B37871: 1206(NPO) B37872: 1206(X7R) B37472: 1206(X8R) B37873: 1206(Z5U/Y5U) B37949: 1210(NPO) B37950: 1210(X7R) B37550: 1210(X8R) B37951: 1210(Z5U/Y5U) B37953: 1812(X7R) B37954: 1812(Z5U/Y5U) B37956: 2220(X7R) B37957: 2220(Z5U/Y5U)	J: Pd/Ag K: Ni Barrier	0:25v 5:50v 1:100v 2:200v 3:500v 9:16v	1st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B:±0.10pF C:±0.25pF D:±0.5pF F:±1% G:±2% J: ± 5% K: ± 10% M: ± 20%	Used for decimal place for <10pF 0:Standard	01: Bulk 60: Paper tape, 7" 62: Plastic tape: 7" 70: Paper tape, 13" 72: Plastic tape, 13"

**Johanson: 500R15W474KV4T**

**HEC: C0805X474K050T**

500	R15	W	474	K	V	4	T
Voltage	Size	Dielectric	Capacitance	Tolerance	Termination	Marking	Packaging
100:10V 160:16V 250:25V 500:50V 101:100V 201:200V 251:250V 501:500V 102:1KV 202:2KV 302:3KV 402:4KV 502:5KV	R05:0201 R07:0402 R14:0603 R15:0805 R18:1206 S41:1210 R29:1808 S43:1812 S49:1825 S47:2220 S48:2225	N: NPO W: X7R B:BX X:X5R Z:Z5U Y:Y5V	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B:±0.10pF C:±0.25pF D:±0.5pF F:±1% G:±2% J: ± 5% K: ± 10% M: ± 20% Z:80-20% P:100-0%	V: Nickel Barrier P: Pd/Ag	4: Unmarked 6: EIA Code	E:7" Embossed T:7" Paper U:13" Embossed R:13" Paper W: Waffle Pack None: bulk



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**Kemet: C0805C474K5RAC**

**HEC: C0805X474K050T**

C	0805	C	474	K	5	R	A	C
Cap Style	Size	Special Code	Capacitance	Tolerance	Voltage	Dielectric	Failure Rate	Termination
	0201 0402 0603 0805 1206 1210 1808 1812 1825 2220 2225	C:Standard	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B:±0.10pF C:±0.25pF D:±0.5pF F:±1% G:±2% J: ± 5% K: ± 10% M: ± 20% Z:80-20% P:100-0%	8:10V 4:16v 3:25v 5:50v 1:100v 2:200V	G: NPO R: X7R X:BX U:Z5U V:Y5V	A:Standard	C: Ni/Tin Plate H: Ni/Tin solder T: Silver G: Gold plated

**Murata: GRM21AR71H474KA01L**

**HEC: C0805X474K050T**

GRM	21	A	R7	1H	474	K	A01	L
Cap Style	Size	Thickness	Dielectric	Voltage	Capacitance	Tolerance	Special Code	Packaging
	03:0201 15:0402 18:0603 21:0805 31:1206 32:1210 42:1808 43:1812 43-2:1825 55:2220 57:2225	2:0.2mm 3:0.3mm 5:0.5mm 6:0.6mm 7:0.7mm 8:0.8mm 9:0.9mm A:1mm B:1.25mm C:1.6mm D:2mm E:2.5mm	5C: NPO R7: X7R E4:Z5U F5:Y5V C7:X7S R9:X8R	0G:4v 0J:6.3v 1A:10v 1C:16v 1E:25v 1H:50v 2A:100v 2D:200v 2E:250V YD:300V 2H:300V 2J:630V 3A:1KV 3D:2KV E2:250VAC	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B:±0.10pF C:±0.25pF D:±0.5pF F:±1% G:±2% J: ± 5% K: ± 10% M: ± 20% Z:80-20%	A01: Standard	D: 7" Paper L: 7" Plastic K: 13" Plastic J: 13" Paper B: Bulk C: Bulk Case T: Bulk Tray



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**NIC: NMC0201X7R474K50TRPLP** **HEC: C0805X474K050T**

NMC	0201	X7R	474	K	50	TRPLP	
Cap Style	Size	Dielectric	Capacitance	Tolerance	Voltage	Packaging	Marking
	0201 0402 0603 0805 1206 1210 1808 1812 1825 2220 2225	NPO X7R Z5U Y5V	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B:±0.10pF C:±0.25pF D:±0.5pF F:±1% G:±2% J: ± 5% K: ± 10% M: ± 20% Z:80-20%	10:10v 16:16v 25:25v 50:50v 100:100v 200:200v 500:500v	TRP: Tape & reel (Paper) TRPLP: Tape & reel (Plastic)	M:Marked Blank: Unmarked

**Novacap: 0805B474K500NXT** **HEC: C0805X474K050T**

0805	B	474	K	500	N		T	
Size	Dielectric	Capacitance	Tolerance	Voltage	Termination	Thickness Option	Packaging	Marking
0201 0402 0603 0805 1206 1210 1808 1812 1825 2220 2225	N: NPO B: X7R X: BX Z: Z5U Y: Y5V S: X8R	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B:±0.10pF C:±0.25pF D:±0.5pF F:±1% G:±2% J: ± 5% K: ± 10% M: ± 20% Z:80-20%	160:16V 250:25V 500:50V 101:100V 251:250V 501:500V 102:1KV 202:2KV 302:3KV 402:4KV 502:5KV 103:10KV	N: Ni Barrier/ 100% Tin P: Pd/Ag Y: Ni Barrier/ 90/10 Tin	X080: Thickness ≤.080" X100: Thickness ≤.100" Blank: Std. cataloge Thk.	T: Tape & Reel W: waffle Blank: Bulk	M: Marked Blank: unmarket



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**Panasonic: ECJ2YB1H474K**

**HEC: C0805X474K050T**

ECJ	2	Y	B	1H	474	K
Ceramic Cap. Style	Size	Packaging	Dielectric	Voltage	Capacitance	Tolerance
	0:0402 1:0603 2:0805 3:1206 4:1210	E: 7" Paper 2mm pitch V: 7" Paper 4mm pitch Y,F: 7" Plastic 4mm W: 13" reel 4mm pitch C: Bulk case X: Bulk	C: NPO B: X7R F: Y5V	0J: 6.3V 1A: 10V 1C: 16V 1E: 25V 1H: 50V 2A: 100V 2D: 200V	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	C: ±0.25pF D: ±0.5pF F: ±1% G: ±2% J: ± 5% K: ± 10% M: ± 20% Z: 80-20%

**Philips: 08052R474K9BBEA**

**HEC: C0805X474K050T**

0805	2R	474	K	9	B	B	EA
Size	Dielectric	Capacitance	Tolerance	Voltage	Termination	Packaging	Cap. Series
0201 0402 0603 0805 1206 1210 1808 1812 1825 2220 2225	CG: NPO 2R: X7R 2E: Z5U 2F: Y5V	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B: ±0.10pF C: ±0.25pF D: ±0.5pF F: ±1% G: ±2% J: ± 5% K: ± 10% M: ± 20% Z: 80-20%	7: 16V 8: 25V 9: 50V 0: 100V B: 200V D: 500V E: 1KV F: 2KV G: 3KV	A: Pd/Ag B: Ni Barrier	B: 7" Plastic F: 13" Plastic 2: 7" Paper 3: 13" Paper P: Bulk Case	C: Ceramic EA: Compact MA: Microwave



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**Phycomp: 08052R474K9BB0**

**HEC: C0805X474K050T**

0805	2R	474	K	9	B	B	0	0
Size	Dielectric	Capacitance	Tolerance	Voltage	Termination	Packaging	Marking	Range ID
0201 0402 0603 0805 1206 1210 1808 1812	CG: NPO 2B: X5R 2E: Z5U 2F: Y5V 2R: X7R	1 st two digits are significant, 3rd digit denotes the multiplier 8: X0.01 9: X0.1 0: X1 1: X10 2: X100 3: X1000 4: X10000 5: X100000	B: ±0.10pF C: ±0.25pF D: ±0.5pF F: ±1% G: ±2% J: ± 5% K: ± 10% M: ± 20% Z: 80-20%	7: 16V 8: 25V 9: 50V 0: 100V B: 200V C: 250V D: 500V E: 1KV F: 2KV G: 3KV H: 4KV	B: Ni Sn	B: 7" Plastic F: 13" Plastic 2: 7" Paper 3: 13" Paper P: Bulk	0: Unmarked	Q: Conventional Ceramic M: Microwave D: BME

**Presidio: 0805X7R474K2NT91**

**HEC: C0805X474K050T**

0805	X7R	474	K	2	NT9	1
Size	Dielectric	Capacitance	Tolerance	Voltage	Termination	Packaging
0201 0402 0603 0805 1206 1210 1808 1812 1825 2220 2225	NPO X7R Z5U Y5V	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B: ±0.10pF C: ±0.25pF D: ±0.5pF F: ±1% G: ±2% J: ± 5% K: ± 10% M: ± 20% Z: 80-20%	1: 25V 2: 50V 3: 100V 4: 200V 5: 250V 6: 500V 9: 1KV 11: 2KV 13: 3KV 15: 5KV	B: Ni Barrier P: Pd/Ag	1: 7" Plastic Unmarked 2: 7" Plastic Marked 3: Bulk Unmarked 4: Bulk Marked 5: Waffle Unmarked 6: Waffle Marked



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**Rohm: MCH215C474KP**

**HEC: C0805X474K050T**

MCH	21	5	C	474	K	P
Termination	Size	Voltage	Dielectric	Capacitance	Tolerance	Packaging
MCH: Ni Barrier MC: Pd/Ag	3:0201 15:0402 18:0603 21:0805 31:1206 32:1210 43:1812	3:16V 2:25V 5:50V 1:100V 6:200V 7:500V	A:NPO C:X7R E:Z5U F:Y5V	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B:±0.10pF C:±0.25pF D:±0.5pF F:±1% G:±2% J: ± 5% K: ± 10% M: ± 20% Z:80-20%	P: 7" Plastic Q: 13" Plastic K: 7" Paper C: Bulk Case B: Bulk Bag None: Bulk

**Samsung: CL21B474KBNNE**

**HEC: C0805X474K050T**

CL	21	B	474	K	B	N	N	E
Cap. Series	Size	Dielectric	Capacitance	Tolerance	Voltage	Termination	Product Series	Packaging
	03:0201 05:0402 10:0603 21:0805 31:1206 32:1210 42:1808 43:1812 55:2220	A:X5R B:X7R C:NPO F:Y5V	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B:±0.10pF C:±0.25pF D:±0.5pF F:±1% G:±2% J: ± 5% K: ± 10% M: ± 20% Z:80-20%	R:4V Q:6.3V P:10V O:16V A:25V B:50V C:100V D:200V E:250V G:500V I:1KV J:2KV K:3KV	N:NI/100% Sn P: Pd/Ag S: Ag	A: Array(2 element) B: Array(4 element) C: Hi-Q L: LCC N: Normal P: Automotive	B: Bulk P: Bulk Case C: 7" Paper O,D: 13" Paper E: 7" Plastic F: 13" Plastic S: 10" Plastic



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Syfer: 0805J0500474KXT

HEC: C0805X474K050T

0805	J	050	0474	K	X	T
EIA Size	Termination	Voltage	Capacitance	Tolerance	Dielectric	Packaging
0201 0402 0603 0805 1206 1210 1808 1812 1825 2220 2225	J: Ni barrier F: Pd/Ag A: Special Y: Flex Term.	016:16v 025:25v 063:63v 100:100v 200:200v 250:250v 630:630v 1K0:1kv..... .....5K0:5kv	First digit is 0. 2nd and 3rd digits are significant. The 4th digit denotes number of zeros. P= Decimal 5P00: 5.0 pF 0100: 10 pF 0330: 33 pF 0471: 470 pF 0102: 1000 pF	B: ±0.10pF C: ±0.25pF D: ±0.50pF F: ± 1% G: ± 2% J: ± 5% K: ± 10% M: ± 20% Z:80-20%	C:NPO X: X7R B: BX Y: Y5V Q: Hi-fire Q	T: 7" Reel R: 13" Reel B: Bulk C: cassette

TDK: C2012X7R1H474KT

HEC: C0805X474K050T

C	2012	X7R	1H	474	K	T
Cap Series	Size	Dielectric	Voltage	Capacitance	Tolerance	Packaging
0603:0201 1005:0402 1608:0603 2012:0805 3216:1206 3225:1210 4532:1812 5750:2220	CG:NPO X7R X5R Y5V Z5U	OJ:6.3V 1A:10V 1C:16V 1E:25V 1H:50V 2A:100V 2E:250V 2J:630V 3D:2KV	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B: ±0.10pF C: ±0.25pF D: ±0.50pF F: ± 1% G: ± 2% J: ± 5% K: ± 10% M: ± 20% Z:80-20%	T: T & R B: Bulk	



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Taiyo Yuden: UMK212 B474KZ-T

HEC: C0805X474K050T

U	M	K	212	B	474	K	Z	-	T
Voltage	Ceramic Cap	Termination	Size	Dielectric	Capacitance	Tolerance	Thickness Option	Special Code	Packaging
A:4V J:6.3V L:10V E:16V T:25V U:50V		K: Ni Barrier	063:0201 105:0402 107:0603 212:0805 316:1206 325:1210 432:1812 550:2220	CG:NPO CH:NPO CJ:NPO CK:NPO B:X7R BJ:X5R F:Y5V	1 st two digits are significant, 3rd digit denotes number of zeros. 010: 1.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B:±0.10pF C: ±0.25pF D: ±0.50pF F: ± 1% G: ± 2% J: ± 5% K: ± 10% M: ± 20% Z:80-20%	C:0.2mm P:0.3mm V:0.5mm Z:0.8mm	-: Standard	F: 7" T & R, 2mm pitch T: 7" T & R, 4mm

Venkel: C0805X7R500474KN E

HEC: C0805X474K050T

C	0805	X7R	500	474	K	N	E	
Cap Series	Size	Dielectric	Voltage	Capacitance	Tolerance	Termination	Marking	Packaging
	0201 0402 0603 0805 1206 1210 1812 2220	NPO X7R X5R Z5U Y5V	100:10V 160:16V 250:25V 500:50V 101:100V 251:250V 501:500V 102:1KV 202:2KV 302:3KV	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B:±0.10pF C: ±0.25pF D: ±0.50pF F: ± 1% G: ± 2% J: ± 5% K: ± 10% M: ± 20% Z:80-20%	N: Ni Barrier P: Pd/Ag G: Gold/Ni	Blank: Unmarked 2: Color Code 6: Marked	P: Paper E: Plastic B: Bulk



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**Vishey/Vitramon: VJ0805Y474KXAAT**

**HEC: C0805X474K050T**

VJ	0805	Y	474	K	X	A	A	T
Vishey Cap	Size	Dielectric	Capacitance	Tolerance	Termination	Voltage	Marking	Packaging
	0201 0402 0603 0805 1206 1210 1808 1812 1825 2220 2225	A,N:NPO Y:X7R U:Z5U X:BX H:X8R	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	B:±0.10pF C: ±0.25pF D: ±0.50pF F: ± 1% G: ± 2% J: ± 5% K: ± 10% M: ± 20% Z:80-20%	X: Ni Barrier P: Pd/Ag	X:25V A:50V B:100V C:250V E:500V G:1KV	A:Unmarked M: Marked	T: 7" Plastic R:13" Plastic C:7" Paper P:13" Paper B: Bulk

**Walsin: 0805B474K500LT**

**HEC: C0805X474K050T**

0805	B	474	K	500	L	T
Size	Dielectric	Capacitance	Tolerance	Voltage	Termination	Packaging
0201 0402 0603 0805 1206 1210 1808 1812	N:NPO B:X7R X:X5R S:X6S F:Y5V	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF	A:±0.05pF B:±0.10pF C: ±0.25pF D: ±0.50pF F: ± 1% G: ± 2% J: ± 5% K: ± 10% M: ± 20% Z:80-20%	Two significant digits followed by # of zeros. R=decimal 4R0:4v 6R0:6.3V 100:10V 160:16V 250:25V 500:50V 101:100V	L:Ag/Ni/Sn C:Cu/Ni/Sn	T: 7" Reel Q:10" Reel G:13" Reel B: Bulk C: Bulk Cassette



Surface mount MLCC Capacitor X-Reference Guide

Yageo: CC0805KKX7R9BB474

HEC: C0805X474K050T

CC	0805	K	K	X7R	9	BB	474
Cap. Series	Size	Tolerance	Packaging	Dielectric	Voltage		Capacitance
	0402 0603 0805 1206 1210 1808 1812	B: ±0.10pF C: ±0.25pF D: ±0.50pF F: ± 1% G: ± 2% J: ± 5% K: ± 10% M: ± 20% Z: 80-20%	K: 7" Plastic F: 13" Plastic R: 7" Paper P: 13" Paper C: Bulk	NPO X7R Y5V	6: 10V 7: 16V 8: 25V 9: 50V 0: 100V	BB used with X7R and Y5V. BN used for NPO	1 st two digits are significant, 3rd digit denotes number of zeros. R= Decimal 5R0: 5.0 pF 100: 10 pF 330: 33 pF 471: 470 pF 102: 1000 pF