



# Holystone Enterprise. Co., Ltd. Surface Mount MLCC Capacitor X-Reference Guide

**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 2211 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	

**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	4: 4V 6: 6.3V Z:10V Y:16V 3:25V 5:50V 1:100V 2:200V V:250V 7:500V C:600/630V A:1KV S:1500V G:2KV W:2500V H:3KV J:4KV K:5KV P:250 Telco Rating	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: Standard	T:Ni/Tin Plate 1: Pd/Ag 7: Ni/Au Plate	1 or 2:7" Reel 3 or 4:13" Reel 7: Bulk Cassette 9: Bulk	A: Standard



# Holystone Enterprise. Co., Ltd.

## Surface Mount MLCC Capacitor

### X-Reference Guide

<b>CAL CHIP: GMC21X7R474K50T</b>					<b>HEC: C0805X474K050T</b>			
<b>GMC/CHV</b>	<b>21</b>	<b>X7R</b>	<b>474</b>	<b>K</b>	<b>50</b>	<b>N</b>	<b>T</b>	
Cap Style	Size	Dielectric	Capacitance	Tolerance	Voltage	Termination	Packaging	Marking
	02:0201 04:0402 10:0603 21:0805 31:1206 32:1210 40: 1808 43:1812 45:1825 55:2220 57:2225	CG /C(NPO) X7R/X X5R Z5U/Z Y5V/Y	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%	6R3: 6.3v 10: 10v 16: 16v 25:25v 50:50v 100:100v 200:200v 500:500v 1k0: 1000v 2k0: 2000v 3k0: 3000v 5k0: 5000v	N: Ni Barrier	B: Bulk E: Plastic Tape T: Paper Tape	M:Marked None: Unmarked

<b>Epcos: B37941K5474K062</b>					<b>HEC: C0805X474K050T</b>	
<b>B37941</b>	<b>K</b>	<b>5</b>	<b>474</b>	<b>K</b>	<b>0</b>	<b>62</b>
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"



# Holystone Enterprise. Co., Ltd. Surface Mount MLCC Capacitor X-Reference Guide

## Johanson: 500R15W474KV4T

## HEC: C0805X474K050T

500	R15	W	474	K	V	4	T
Voltage	Size	Dielectric	Capacitance	Tolerance	Termination	Marking	Packaging
6R3: 6.3V 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 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

## 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



# Holystone Enterprise. Co., Ltd. Surface Mount MLCC Capacitor X-Reference Guide

## Murata: GRM21AR71H474KA01L

## HEC: C0805X474K050T

GRM	21	B	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

## NIC: NMC0805X7R474K50TRPLP

## HEC: C0805X474K050T

NMC	0201	X7R	474	K	50	TRPLP	Marking
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



# Holystone Enterprise. Co., Ltd. Surface Mount MLCC Capacitor X-Reference Guide

<b>Novacap: 0805B474K500NXT</b>						<b>HEC: C0805X474K050T</b>		
0805	B	474	K	500	N	Thickness Option	T	Marking
Size	Dielectric	Capacitance	Tolerance	Voltage	Termination		Packaging	
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. catalogue Thk.	T: Tape & Reel W: waffle Blank: Bulk	M: Marked Blank: unmarket

<b>Panasonic: ECJ2YB1H474K</b>					<b>HEC: C0805X474K050T</b>	
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%



# Holystone Enterprise. Co., Ltd. Surface Mount MLCC Capacitor X-Reference Guide

## 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	O: Ceramic EA: Compact MA: Microwave

## Phycomp: 08052R474K9BB00

## HEC: C0805X474K050T

0805	2R	474	K	9	B	B	0	0
Size	Dielectric	Capacitance	Tolerance	Voltage	Termination	Packaging	Marking	Range ID
0402 0603 0805 1206 1210 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	0: Conventional Ceramic M: Microwave D: BME



# Holystone Enterprise. Co., Ltd. Surface Mount MLCC Capacitor X-Reference Guide

## Presidio: 0805X7R474K2NT91

## HEC: C0805X474K050T

0805	X7R	474	K	2	NT9	1
Size	Dielectric	Capacitance	Tolerance	Voltage	Termination	Packaging
0402 0603 0805 1206 1210 1808 1812 1825 2220 2225	NPO BX X7R 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%	10V = 10 VDC 12V = 12 VDC 16V = 16 VDC 1:25V 2:50V 3:100V 4:200V 5:250V 6:500V 9:1KV 11:2KV 13:3KV 15:5KV	NT9 : 90/10 Tin / Lead over Nickel P: Pd/Ag NG: Gold over Nickel	1: 7" Plastic Unmarked 2: 7" Plastic Marked 3: Bulk Unmarked 4: Bulk Marked 5: Waffle Unmarked 6: Waffle Marked A. Reel, 13", plastic tape, unmarked B. Reel, 13", plastic tape, marked

## 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	4:10V 3:16V 2:25V 5:50V 1:100V 6:200V 7:500V	A, AN:NPO CN:X7R FN: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



# Holystone Enterprise. Co., Ltd. Surface Mount MLCC Capacitor X-Reference Guide

## 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 L:35V 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:LICC 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

## 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 1K0:1k 5K0:5kv	First digit is 0. 2nd and 3rd digits are significant. The 4th dgt 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





# Holystone Enterprise. Co., Ltd. Surface Mount MLCC Capacitor X-Reference Guide

## 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	

## 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 G:35V U:50V H:100V Q:250V		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 B7: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 pitch B: Bulk



# Holystone Enterprise. Co., Ltd. Surface Mount MLCC Capacitor X-Reference Guide

## Venkel: C0805X7R500474KN E

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

## Vishay/Vitramon: VJ0805Y474KXAAT

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 3640	A,N:NPO Y:X7R G: X5R H:X8R V: 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 473: 0.047uF	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	S: 4V Y: 6.3V Q: 10V J: 16V X: 25V A: 50V B: 100V C: 200V P: 250V E: 500V G: 1KV F: 2KV H: 3KV	A: Unmarked M: Marked	T: 7" Plastic R: 13" Plastic C: 7" Paper P: 13" Paper B: Bulk



# Holystone Enterprise. Co., Ltd. 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 X5R 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

## 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 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 201: 200V 102: 1000V	L:Ag/Ni/Sn C:Cu/Ni/Sn	T: 7" Reel Q:10" Reel G:13" Reel B: Bulk C: Bulk Cassette



# Holy Stone Enterprise. Co., Ltd. Surface Mount MLCC Capacitor X-Reference Guide

## Safety Certified Multilayer Ceramic Chip Capacitor Cross Reference Guide

### HEC: SCC1808X102K302T

SCC	1808	X	102	K	302	T	S
Safety Certified Capacitor	EIA Size	Dielectric	Capacitance	Tolerance	Voltage	Packaging	Special Requirement
	1808 1812 2208 2211 2220 2825	N: NPO X: X7R	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	J: ± 5% K: ± 10% M: ± 20%	202: X2 302: X2/Y3 502: X1/Y2 602: X1/Y2 (2208,2211, 2220 sizes)	T: Tape & Reel (7")	S: Arc Resistant coating X: Super Term Z: Coated and Super Term G: 100% Pb Free

### Johanson: 302R29W102KV4E-\*\*\*\*-SC

302	R29	W	102	K	V	4	E	SC
Impulse Voltage	Size	Dielectric	Capacitance	Tolerance	Termination	Marking	Packaging	Type
302: 3 KV 502: 5 KV	R29: 1808 S43: 1812 R30: 2211 S47: 2220	N: NPO X: X7R	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	J: ± 5% K: ± 10% M: ± 20%	V: Ni barrier with 100%	3: Special (JSC)	E: Embossed 7" Reel	SC: Safety Certified



# Holy Stone Enterprise. Co., Ltd.

## Surface Mount MLCC Capacitor

### X-Reference Guide

#### Novacap: LS1808B102K302NX080TM

LS1808	B	102	K	302	N	X080	T	M
Size	Dielectric	Capacitance	Tolerance	Voltage	Termination	Thickness Option	Packaging	Marking
LS1808 LS1812 ES2211 ES2215 ES2225	N: COG B: X7R	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	J: ± 5% K: ± 10% M: ±	302: 3 KVDC 502: 5 KVDC	V: Ni barrier with 100% Sn plating	X080: Thickness ≤.080"	T: Tape & Reel	M:

#### Murata: GA342QR7GD102KW01L

GA3	42	Q	R7	GD	102	K	W01	L
Product Series	Size	Thickness	Dielectric	Voltage	Capacitance	Tolerance	Individual Spec Code	Packaging
GA3: Safety Certified	42: 1808 43: 1812 52: 2211 55: 2220	D: 0.080" Q: 0.060"	1X: SL R7: X7R	GB: X2 GC: X1 GD: Y3 GF: Y2	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	J: ± 5% K: ± 10% M: ± 20%		L: 7" Reel



# Holystone Enterprise. Co., Ltd. Surface Mount MLCC Capacitor X-Reference Guide

## Syfer: 1808JA250102KXTSP

1808	J	A25	0102	K	X	T	SPU
EIA Size	Termination	Voltage	Capacitance	Tolerance	Dielectric	Packaging	Type
1808 1812 2211 2220	J: Ni barrier Y: Flexicap	A25: 250VAC	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	C: ± 0.25pF D: ± 0.50pF F: ± 1% G: ± 2% J: ± 5% K: ± 10% M: ± 20%	C: COG/NP O	T: 7" Reel R: 13" Reel	SY2: Safety Cap (Unmarked)* Y2: Safety Cap (Marked)* SP: Safety Cap (Marked)* SP : Safety Cap (Unmarked)* B16: X1/Y2* B17: X2*

## Kyocera: CF42X7R102K2000ATY3

CF	42	X7R	102	K	2000	A	Y3	
Product Series	EIA Size	Dielectric	Capacitance	Tolerance	Voltage	Termination	Packaging	Type
CF: High Voltage	42: 1808 52: 2208 53: 2211	CH: 0±60ppm X7R: X7R	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	J: ± 5% K: ± 10% M: ± 20%	2000: 2 KV 3000: 3KV	A: Ni barrier	T: 7" Reel B: Bulk Y2: Y2 Y3: Y3	



**Holystone Enterprise. Co., Ltd.**  
**Surface Mount MLCC Capacitor**  
**X-Reference Guide**

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