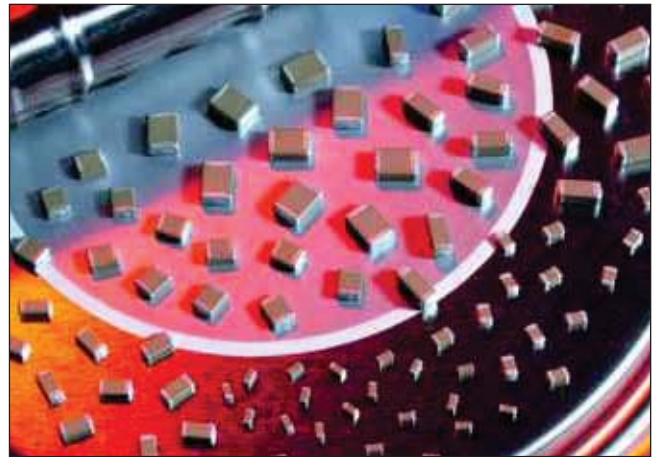


TCC/VCC Capacitors - (BX & BZ) X7R

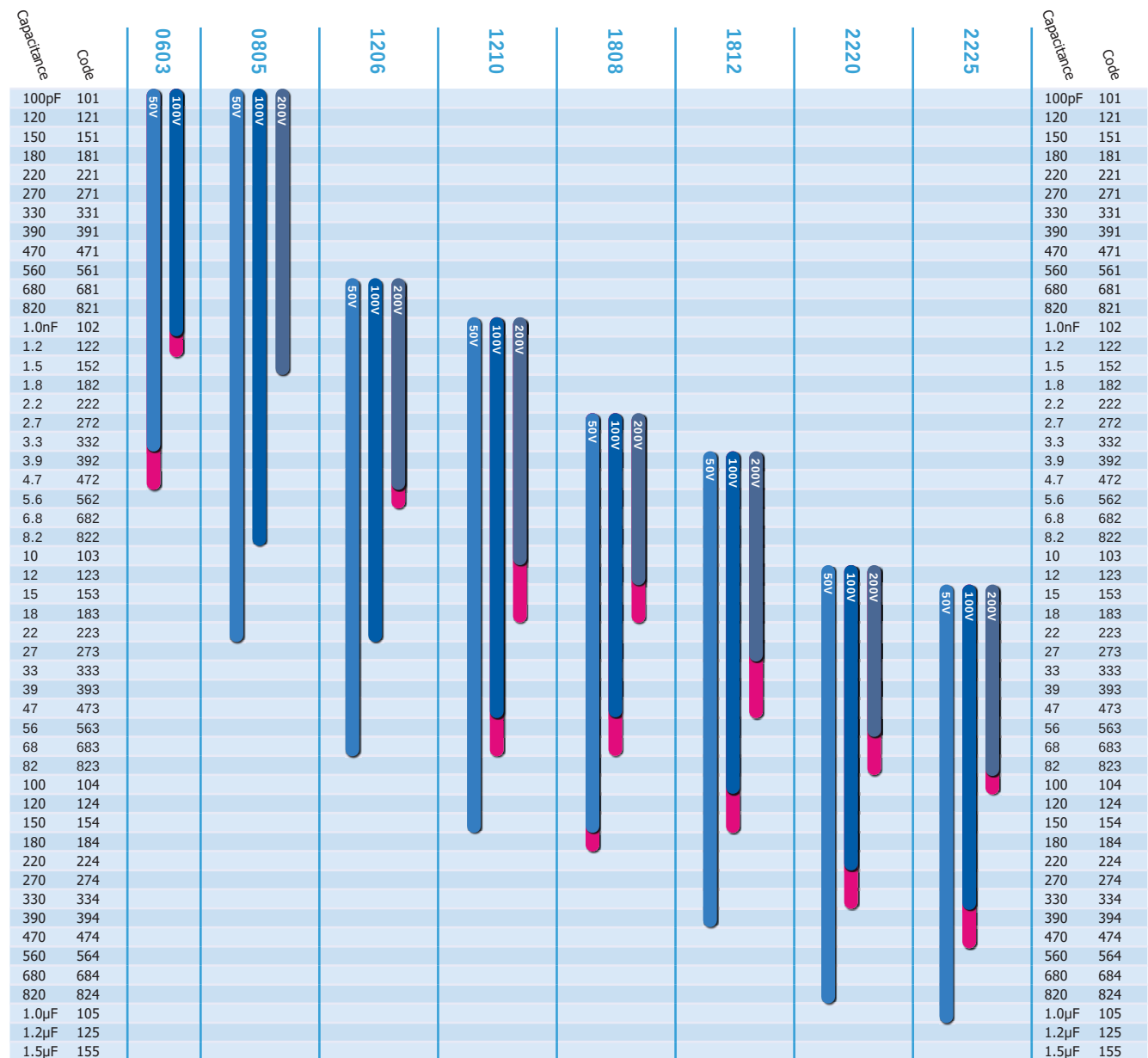
X7R capacitors with a defined capacitance variation under applied dc voltage, across the full operating temperature range.

Whilst the capacitance of COG/NP0 chips does not vary with applied voltage, standard X7R capacitors exhibit capacitance fluctuation but with no specified limit.

For applications where a limit is required, Knowles is able to offer either a "B" code dielectric (conforms to MIL "BX" dielectric and IECQ-CECC "2X1") or "R" code dielectric (conforms to MIL "BZ" dielectric and IECQ-CECC "2C1").



TCC/VCC Capacitors - 2X1 (BX)



● = non RoHS compliant and FlexiCap™ termination only. Other values available in J, Y (FlexiCap™) and F terminations.

TCC/VCC Capacitors - (BX & BZ) X7R

TCC/VCC Capacitors - 2C1 (BZ)

Capacitance	Code	0603	0805	1206	1210	1808	1812	2220	2225	Capacitance	Code
100pF	101									100pF	101
120	121									120	121
150	151									150	151
180	181									180	181
220	221									220	221
270	271									270	271
330	331									330	331
390	391									390	391
470	471									470	471
560	561									560	561
680	681									680	681
820	821									820	821
1.0nF	102									1.0nF	102
1.2	122									1.2	122
1.5	152									1.5	152
1.8	182									1.8	182
2.2	222									2.2	222
2.7	272									2.7	272
3.3	332									3.3	332
3.9	392									3.9	392
4.7	472									4.7	472
5.6	562									5.6	562
6.8	682									6.8	682
8.2	822									8.2	822
10	103									10	103
12	123									12	123
15	153									15	153
18	183									18	183
22	223									22	223
27	273									27	273
33	333									33	333
39	393									39	393
47	473									47	473
56	563									56	563
68	683									68	683
82	823									82	823
100	104									100	104
120	124									120	124
150	154									150	154
180	184									180	184
220	224									220	224
270	274									270	274
330	334									330	334
390	394									390	394
470	474									470	474
560	564									560	564
680	684									680	684
820	824									820	824
1.0µF	105									1.0µF	105
1.2µF	125									1.2µF	125
1.5µF	155									1.5µF	155

● = non RoHS compliant and FlexiCap™ termination only. Other values available in J, Y (FlexiCap™) and F terminations.

Ordering information - TCC/VCC Capacitors

0603	J	050	0471	J	B	B	— — —
Chip size	Termination	Voltage	Capacitance in picofarads (pF)	Capacitance tolerance	Dielectric	Packing	Suffix code
0603 0805 1206 1210 1808 1812 2220 2225	Y = FlexiCap™ termination base with Ni barrier (100% matte tin plating). RoHS compliant. H = FlexiCap™ termination base with Ni barrier (Tin/lead plating with min. 10% lead). Not RoHS compliant. F = Silver Palladium. RoHS compliant. J = Nickel barrier (100% matte tin plating). RoHS compliant. Lead free. A = Nickel barrier (Tin/lead plating with min. 10% lead). Not RoHS compliant.	050 = 50V 100 = 100V 200 = 200V	1st digit is 0. 2nd and 3rd digits are significant figures of capacitance code. The 4th digit is number of 0's following eg. 0471 = 470pF 0824 = 820nF	G = ±2% J = ±5% K = ±10% M = ±20%	B = 2X1/BX released in accordance with IECQ-CECC R = 2C1/BZ released in accordance with IECQ-CECC	T = 178mm (7") reel R = 330mm (13") reel B = Bulk pack - tubs	Used for specific customer requirements

