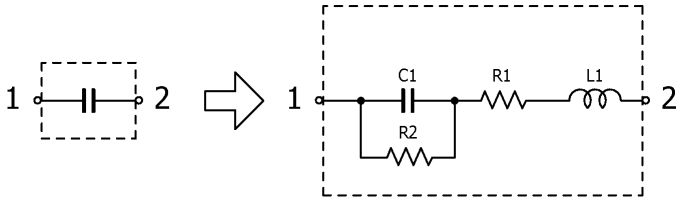
# TDK Equivalent Circuit Model Library

## Multilayer Ceramic Chip Capacitors

Aug. 18, 2020
Simple Model

Automotive Grade, Counductive Epoxy Application / CGA3 series (1/6)

### Circuit Diagram




### Circuit Parameters

| Part No. | C1[pF] | L1[nH] | R1[ohm] | R2[Gohm] |
|---|---|---|---|---|
| CGA3E2C0G2A010C080AD | 1 | 0.420 | 1.1407 | 10.0 |
| CGA3E2C0G1H010C080AD | 1 | 0.420 | 0.9827 | 10.0 |
| CGA3E2C0G2A1R5C080AD | 1.5 | 0.420 | 0.7938 | 10.0 |
| CGA3E2C0G1H1R5C080AD | 1.5 | 0.420 | 1.2185 | 10.0 |
| CGA3E2C0G2A020C080AD | 2 | 0.420 | 1.0049 | 10.0 |
| CGA3E2C0G1H020C080AD | 2 | 0.420 | 0.9188 | 10.0 |
| CGA3E2C0G2A2R2C080AD | 2.2 | 0.420 | 0.5751 | 10.0 |
| CGA3E2C0G1H2R2C080AD | 2.2 | 0.420 | 0.6028 | 10.0 |
| CGA3E2C0G2A030C080AD | 3 | 0.420 | 0.8279 | 10.0 |
| CGA3E2C0G1H030C080AD | 3 | 0.420 | 0.7233 | 10.0 |
| CGA3E2C0G2A3R3C080AD | 3.3 | 0.420 | 0.8276 | 10.0 |
| CGA3E2C0G1H3R3C080AD | 3.3 | 0.420 | 0.4953 | 10.0 |
| CGA3E2C0G2A040C080AD | 4 | 0.420 | 0.6683 | 10.0 |
| CGA3E2C0G1H040C080AD | 4 | 0.420 | 0.5992 | 10.0 |
| CGA3E2C0G2A4R7C080AD | 4.7 | 0.420 | 0.5966 | 10.0 |
| CGA3E2C0G1H4R7C080AD | 4.7 | 0.420 | 0.3666 | 10.0 |
| CGA3E2C0G2A050C080AD | 5 | 0.420 | 0.4904 | 10.0 |
| CGA3E2C0G1H050C080AD | 5 | 0.420 | 0.3921 | 10.0 |
| CGA3E2C0G2A060D080AD | 6 | 0.420 | 0.4810 | 10.0 |
| CGA3E2C0G1H060D080AD | 6 | 0.420 | 0.3985 | 10.0 |
| CGA3E2C0G2A6R8D080AD | 6.8 | 0.420 | 0.4434 | 10.0 |
| CGA3E2C0G1H6R8D080AD | 6.8 | 0.420 | 0.3038 | 10.0 |
| CGA3E2C0G2A070D080AD | 7 | 0.420 | 0.4387 | 10.0 |
| CGA3E2C0G1H070D080AD | 7 | 0.420 | 0.4918 | 10.0 |
| CGA3E2C0G2A080D080AD | 8 | 0.420 | 0.3963 | 10.0 |
| CGA3E2C0G1H080D080AD | 8 | 0.420 | 0.3141 | 10.0 |
| CGA3E2C0G2A090D080AD | 9 | 0.420 | 0.3734 | 10.0 |
| CGA3E2C0G1H090D080AD | 9 | 0.420 | 0.4633 | 10.0 |
| CGA3E2C0G2A100D080AD | 10 | 0.420 | 0.3177 | 10.0 |
| CGA3E2C0G1H100D080AD | 10 | 0.420 | 0.3084 | 10.0 |
| CGA3E2C0G2A120J080AD | 12 | 0.420 | 0.3774 | 10.0 |
| CGA3E2C0G1H120J080AD | 12 | 0.420 | 0.3580 | 10.0 |
| CGA3E2C0G2A150J080AD | 15 | 0.420 | 0.3337 | 10.0 |
| CGA3E2C0G1H150J080AD | 15 | 0.420 | 0.3727 | 10.0 |
| CGA3E2C0G2A180J080AD | 18 | 0.420 | 0.2832 | 10.0 |
| CGA3E2C0G1H180J080AD | 18 | 0.420 | 0.3009 | 10.0 |

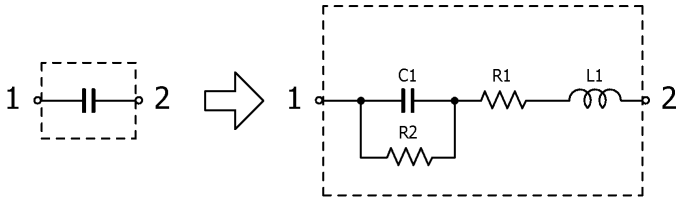
# TDK Equivalent Circuit Model Library

## Multilayer Ceramic Chip Capacitors

Aug. 18, 2020
Simple Model

Automotive Grade, Counductive Epoxy Application / CGA3 series (2/6)

### Circuit Diagram




### Circuit Parameters

| Part No. | C1[pF] | L1[nH] | R1[ohm] | R2[Gohm] |
|---|---|---|---|---|
| CGA3E2C0G2A220J080AD | 22 | 0.420 | 0.2436 | 10.0 |
| CGA3E2C0G1H220J080AD | 22 | 0.420 | 0.2911 | 10.0 |
| CGA3E2C0G2A270J080AD | 27 | 0.420 | 0.2617 | 10.0 |
| CGA3E2C0G1H270J080AD | 27 | 0.420 | 0.2376 | 10.0 |
| CGA3E2C0G2A330J080AD | 33 | 0.420 | 0.2683 | 10.0 |
| CGA3E2C0G1H330J080AD | 33 | 0.420 | 0.2471 | 10.0 |
| CGA3E2C0G2A390J080AD | 39 | 0.420 | 0.1719 | 10.0 |
| CGA3E2C0G1H390J080AD | 39 | 0.420 | 0.2362 | 10.0 |
| CGA3E2C0G2A470J080AD | 47 | 0.420 | 0.3899 | 10.0 |
| CGA3E2C0G1H470J080AD | 47 | 0.420 | 0.2173 | 10.0 |
| CGA3E2C0G2A560J080AD | 56 | 0.420 | 0.1700 | 10.0 |
| CGA3E2C0G1H560J080AD | 56 | 0.420 | 0.1843 | 10.0 |
| CGA3E2C0G2A680J080AD | 68 | 0.420 | 0.1176 | 10.0 |
| CGA3E2C0G1H680J080AD | 68 | 0.420 | 0.1473 | 10.0 |
| CGA3E2C0G2A820J080AD | 82 | 0.420 | 0.1501 | 10.0 |
| CGA3E2C0G1H820J080AD | 82 | 0.420 | 0.1633 | 10.0 |
| CGA3E2C0G2A101J080AD | 100 | 0.420 | 0.0919 | 10.0 |
| CGA3E2C0G1H101J080AD | 100 | 0.420 | 0.1402 | 10.0 |
| CGA3E2C0G2A121J080AD | 120 | 0.420 | 0.1401 | 10.0 |
| CGA3E2C0G1H121J080AD | 120 | 0.420 | 0.0795 | 10.0 |
| CGA3E2C0G2A151J080AD | 150 | 0.420 | 0.0779 | 10.0 |
| CGA3E2C0G1H151J080AD | 150 | 0.420 | 0.0807 | 10.0 |
| CGA3E2C0G2A181J080AD | 180 | 0.420 | 0.1067 | 10.0 |
| CGA3E2C0G1H181J080AD | 180 | 0.420 | 0.0659 | 10.0 |
| CGA3E2C0G2A221J080AD | 220 | 0.420 | 0.0552 | 10.0 |
| CGA3E2C0G1H221J080AD | 220 | 0.420 | 0.0681 | 10.0 |
| CGA3E2C0G2A271J080AD | 270 | 0.420 | 0.0899 | 10.0 |
| CGA3E2C0G1H271J080AD | 270 | 0.420 | 0.0834 | 10.0 |
| CGA3E2C0G2A331J080AD | 330 | 0.420 | 0.0659 | 10.0 |
| CGA3E2C0G1H331J080AD | 330 | 0.420 | 0.0770 | 10.0 |
| CGA3E2C0G2A391J080AD | 390 | 0.420 | 0.1118 | 10.0 |
| CGA3E2C0G1H391J080AD | 390 | 0.420 | 0.0602 | 10.0 |
| CGA3E2C0G2A471J080AD | 470 | 0.420 | 0.0607 | 10.0 |
| CGA3E2C0G1H471J080AD | 470 | 0.420 | 0.0560 | 10.0 |
| CGA3E2C0G2A561J080AD | 560 | 0.420 | 0.0535 | 10.0 |
| CGA3E2C0G1H561J080AD | 560 | 0.420 | 0.0566 | 10.0 |

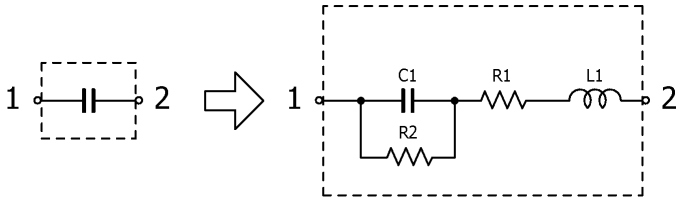
# TDK Equivalent Circuit Model Library

## Multilayer Ceramic Chip Capacitors

Aug. 18, 2020
Simple Model

Automotive Grade, Counductive Epoxy Application / CGA3 series (3/6)

### Circuit Diagram




### Circuit Parameters

| Part No. | C1[pF] | L1[nH] | R1[ohm] | R2[Gohm] |
|---|---|---|---|---|
| CGA3E2C0G2A681J080AD | 680 | 0.420 | 0.0463 | 10.0 |
| CGA3E2C0G1H681J080AD | 680 | 0.420 | 0.0473 | 10.0 |
| CGA3E2C0G2A821J080AD | 820 | 0.420 | 0.0543 | 10.0 |
| CGA3E2C0G1H821J080AD | 820 | 0.420 | 0.0380 | 10.0 |
| CGA3E2C0G2A102J080AD | 1,000 | 0.420 | 0.0369 | 10.0 |
| CGA3E2C0G1H102J080AD | 1,000 | 0.420 | 0.0396 | 10.0 |
| CGA3E2X7R1H102K080AD | 1,000 | 0.420 | 0.3071 | 10.0 |
| CGA3E2X7R1H102M080AD | 1,000 | 0.420 | 0.3071 | 10.0 |
| CGA3E2X8R2A102K080AD | 1,000 | 0.420 | 0.1886 | 10.0 |
| CGA3E2X8R2A102M080AD | 1,000 | 0.420 | 0.1886 | 10.0 |
| CGA3E2X8R1H102K080AD | 1,000 | 0.420 | 0.1886 | 10.0 |
| CGA3E2X8R1H102M080AD | 1,000 | 0.420 | 0.1886 | 10.0 |
| CGA3E2C0G2A122J080AD | 1,200 | 0.420 | 0.0290 | 10.0 |
| CGA3E2C0G1H122J080AD | 1,200 | 0.420 | 0.0366 | 10.0 |
| CGA3E2C0G1H152J080AD | 1,500 | 0.420 | 0.0284 | 10.0 |
| CGA3E2X7R1H152K080AD | 1,500 | 0.420 | 0.1857 | 10.0 |
| CGA3E2X7R1H152M080AD | 1,500 | 0.420 | 0.1857 | 10.0 |
| CGA3E2X8R2A152K080AD | 1,500 | 0.420 | 0.1868 | 10.0 |
| CGA3E2X8R2A152M080AD | 1,500 | 0.420 | 0.1868 | 10.0 |
| CGA3E2X8R1H152K080AD | 1,500 | 0.420 | 0.1868 | 10.0 |
| CGA3E2X8R1H152M080AD | 1,500 | 0.420 | 0.1868 | 10.0 |
| CGA3E2C0G1H182J080AD | 1,800 | 0.420 | 0.0256 | 10.0 |
| CGA3E2C0G1H222J080AD | 2,200 | 0.420 | 0.0310 | 10.0 |
| CGA3E2X7R1H222K080AD | 2,200 | 0.420 | 0.1613 | 10.0 |
| CGA3E2X7R1H222M080AD | 2,200 | 0.420 | 0.1613 | 10.0 |
| CGA3E2X8R2A222K080AD | 2,200 | 0.420 | 0.1359 | 10.0 |
| CGA3E2X8R2A222M080AD | 2,200 | 0.420 | 0.1359 | 10.0 |
| CGA3E2X8R1H222K080AD | 2,200 | 0.420 | 0.1359 | 10.0 |
| CGA3E2X8R1H222M080AD | 2,200 | 0.420 | 0.1359 | 10.0 |
| CGA3E2C0G1H272J080AD | 2,700 | 0.420 | 0.0249 | 10.0 |
| CGA3E2C0G1H332J080AD | 3,300 | 0.420 | 0.0218 | 10.0 |
| CGA3E2X7R1H332K080AD | 3,300 | 0.420 | 0.1117 | 10.0 |
| CGA3E2X7R1H332M080AD | 3,300 | 0.420 | 0.1117 | 10.0 |
| CGA3E2X8R2A332K080AD | 3,300 | 0.420 | 0.0945 | 10.0 |
| CGA3E2X8R2A332M080AD | 3,300 | 0.420 | 0.0945 | 10.0 |
| CGA3E2X8R1H332K080AD | 3,300 | 0.420 | 0.0945 | 10.0 |

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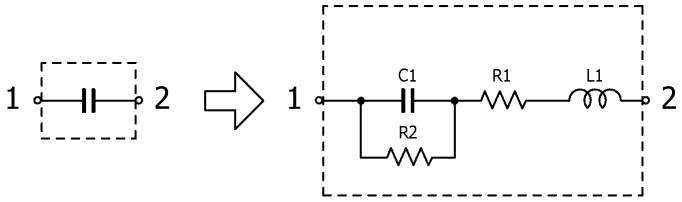
## Multilayer Ceramic Chip Capacitors

Aug. 18, 2020
Simple Model

Automotive Grade, Counductive Epoxy Application / CGA3 series (4/6)

### Circuit Diagram




### Circuit Parameters

| Part No. | C1[pF] | L1[nH] | R1[ohm] | R2[Gohm] |
|---|---|---|---|---|
| CGA3E2X8R1H332M080AD | 3,300 | 0.420 | 0.0945 | 10.0 |
| CGA3E2C0G1H392J080AD | 3,900 | 0.420 | 0.0233 | 10.0 |
| CGA3E2C0G1H472J080AD | 4,700 | 0.420 | 0.0255 | 10.0 |
| CGA3E2X7R1H472K080AD | 4,700 | 0.420 | 0.0906 | 10.0 |
| CGA3E2X7R1H472M080AD | 4,700 | 0.420 | 0.0906 | 10.0 |
| CGA3E2X8R2A472K080AD | 4,700 | 0.420 | 0.0969 | 10.0 |
| CGA3E2X8R2A472M080AD | 4,700 | 0.420 | 0.0969 | 10.0 |
| CGA3E2X8R1H472K080AD | 4,700 | 0.420 | 0.0969 | 10.0 |
| CGA3E2X8R1H472M080AD | 4,700 | 0.420 | 0.0969 | 10.0 |
| CGA3E2C0G1H562J080AD | 5,600 | 0.420 | 0.0263 | 10.0 |
| CGA3E2C0G1H682J080AD | 6,800 | 0.420 | 0.0173 | 10.0 |
| CGA3E2X7R1H682K080AD | 6,800 | 0.420 | 0.0873 | 10.0 |
| CGA3E2X7R1H682M080AD | 6,800 | 0.420 | 0.0873 | 10.0 |
| CGA3E2X8R2A682K080AD | 6,800 | 0.420 | 0.0681 | 10.0 |
| CGA3E2X8R2A682M080AD | 6,800 | 0.420 | 0.0681 | 10.0 |
| CGA3E2X8R1H682K080AD | 6,800 | 0.420 | 0.0681 | 10.0 |
| CGA3E2X8R1H682M080AD | 6,800 | 0.420 | 0.0681 | 10.0 |
| CGA3E2C0G1H822J080AD | 8,200 | 0.420 | 0.0237 | 10.0 |
| CGA3E2C0G1H103J080AD | 10,000 | 0.420 | 0.0160 | 10.0 |
| CGA3E2X7R1H103K080AD | 10,000 | 0.420 | 0.0538 | 10.0 |
| CGA3E2X7R1H103M080AD | 10,000 | 0.420 | 0.0538 | 10.0 |
| CGA3E2X8R2A103K080AD | 10,000 | 0.420 | 0.0509 | 10.0 |
| CGA3E2X8R2A103M080AD | 10,000 | 0.420 | 0.0509 | 10.0 |
| CGA3E2X8R1H103K080AD | 10,000 | 0.420 | 0.0509 | 10.0 |
| CGA3E2X8R1H103M080AD | 10,000 | 0.420 | 0.0509 | 10.0 |
| CGA3E2X7R1H153K080AD | 15,000 | 0.420 | 0.0462 | 10.0 |
| CGA3E2X7R1H153M080AD | 15,000 | 0.420 | 0.0462 | 10.0 |
| CGA3E2X8R2A153K080AD | 15,000 | 0.420 | 0.0378 | 10.0 |
| CGA3E2X8R2A153M080AD | 15,000 | 0.420 | 0.0378 | 10.0 |
| CGA3E2X8R1H153K080AD | 15,000 | 0.420 | 0.0378 | 10.0 |
| CGA3E2X8R1H153M080AD | 15,000 | 0.420 | 0.0378 | 10.0 |
| CGA3E2X7R1H223K080AD | 22,000 | 0.420 | 0.0377 | 10.0 |
| CGA3E2X7R1H223M080AD | 22,000 | 0.420 | 0.0377 | 10.0 |
| CGA3E3X8R2A223K080AD | 22,000 | 0.420 | 0.0522 | 10.0 |
| CGA3E3X8R2A223M080AD | 22,000 | 0.420 | 0.0522 | 10.0 |
| CGA3E2X8R1H223K080AD | 22,000 | 0.420 | 0.0396 | 10.0 |

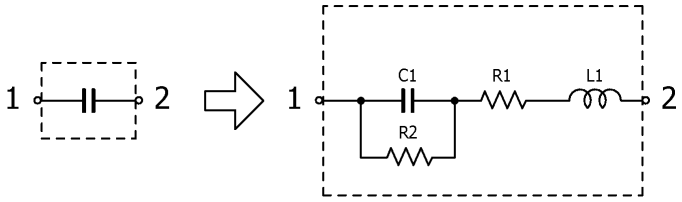
# TDK Equivalent Circuit Model Library

## Multilayer Ceramic Chip Capacitors

Aug. 18, 2020
Simple Model

Automotive Grade, Counductive Epoxy Application / CGA3 series (5/6)

### Circuit Diagram




### Circuit Parameters

| Part No. | C1[pF] | L1[nH] | R1[ohm] | R2[Gohm] |
|---|---|---|---|---|
| CGA3E2X8R1H223M080AD | 22,000 | 0.420 | 0.0396 | 10.0 |
| CGA3E2X7R1H333K080AD | 33,000 | 0.420 | 0.0294 | 10.0 |
| CGA3E2X7R1H333M080AD | 33,000 | 0.420 | 0.0294 | 10.0 |
| CGA3E3X8R2A333K080AD | 33,000 | 0.420 | 0.0273 | 10.0 |
| CGA3E3X8R2A333M080AD | 33,000 | 0.420 | 0.0273 | 10.0 |
| CGA3E2X8R1H333K080AD | 33,000 | 0.420 | 0.0298 | 10.0 |
| CGA3E2X8R1H333M080AD | 33,000 | 0.420 | 0.0298 | 10.0 |
| CGA3E2X7R1H473K080AD | 47,000 | 0.420 | 0.0232 | 10.0 |
| CGA3E2X7R1H473M080AD | 47,000 | 0.420 | 0.0232 | 10.0 |
| CGA3E2X8R1H473K080AD | 47,000 | 0.420 | 0.0195 | 10.0 |
| CGA3E2X8R1H473M080AD | 47,000 | 0.420 | 0.0195 | 10.0 |
| CGA3E2X7R1H683K080AD | 68,000 | 0.420 | 0.0186 | 7.35 |
| CGA3E2X7R1H683M080AD | 68,000 | 0.420 | 0.0186 | 7.35 |
| CGA3E3X8R1H683K080AD | 68,000 | 0.420 | 0.0290 | 7.35 |
| CGA3E3X8R1H683M080AD | 68,000 | 0.420 | 0.0290 | 7.35 |
| CGA3E2X8R1E683K080AD | 68,000 | 0.420 | 0.0180 | 7.35 |
| CGA3E2X8R1E683M080AD | 68,000 | 0.420 | 0.0180 | 7.35 |
| CGA3E2X7R1H104K080AD | 100,000 | 0.420 | 0.0163 | 5.00 |
| CGA3E2X7R1H104M080AD | 100,000 | 0.420 | 0.0163 | 5.00 |
| CGA3E3X8R1H104K080AD | 100,000 | 0.420 | 0.0190 | 5.00 |
| CGA3E3X8R1H104M080AD | 100,000 | 0.420 | 0.0190 | 5.00 |
| CGA3E2X8R1E104K080AD | 100,000 | 0.420 | 0.0130 | 5.00 |
| CGA3E2X8R1E104M080AD | 100,000 | 0.420 | 0.0130 | 5.00 |
| CGA3E3X7R1H154K080AD | 150,000 | 0.420 | 0.0163 | 3.33 |
| CGA3E3X7R1H154M080AD | 150,000 | 0.420 | 0.0163 | 3.33 |
| CGA3E2X7R1E154K080AD | 150,000 | 0.420 | 0.0131 | 3.33 |
| CGA3E2X7R1E154M080AD | 150,000 | 0.420 | 0.0131 | 3.33 |
| CGA3E3X8R1E154K080AD | 150,000 | 0.420 | 0.0169 | 3.33 |
| CGA3E3X8R1E154M080AD | 150,000 | 0.420 | 0.0169 | 3.33 |
| CGA3E3X7R1H224K080AD | 220,000 | 0.420 | 0.0128 | 2.27 |
| CGA3E3X7R1H224M080AD | 220,000 | 0.420 | 0.0128 | 2.27 |
| CGA3E2X7R1C224K080AD | 220,000 | 0.420 | 0.0125 | 0.454 |
| CGA3E2X7R1C224M080AD | 220,000 | 0.420 | 0.0125 | 0.454 |
| CGA3E3X8R1E224K080AD | 220,000 | 0.420 | 0.0282 | 2.27 |
| CGA3E3X8R1E224M080AD | 220,000 | 0.420 | 0.0282 | 2.27 |
| CGA3E1X7R1V334K080AD | 330,000 | 0.420 | 0.0122 | 1.52 |

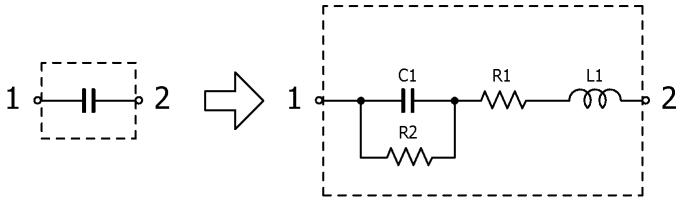
# TDK Equivalent Circuit Model Library

## Multilayer Ceramic Chip Capacitors

Automotive Grade, Counductive Epoxy Application / CGA3 series (6/6)

Aug. 18, 2020
Simple Model

### Circuit Diagram




### Circuit Parameters

| Part No. | C1[pF] | L1[nH] | R1[ohm] | R2[Gohm] |
|---|---|---|---|---|
| CGA3E1X7R1V334M080AD | 330,000 | 0.420 | 0.0122 | 1.52 |
| CGA3E3X7R1E334K080AD | 330,000 | 0.420 | 0.0122 | 1.52 |
| CGA3E3X7R1E334M080AD | 330,000 | 0.420 | 0.0122 | 1.52 |
| CGA3E3X8R1C334K080AD | 330,000 | 0.420 | 0.0139 | 0.303 |
| CGA3E3X8R1C334M080AD | 330,000 | 0.420 | 0.0139 | 0.303 |
| CGA3E1X7R1V474K080AD | 470,000 | 0.420 | 0.0093 | 1.06 |
| CGA3E1X7R1V474M080AD | 470,000 | 0.420 | 0.0093 | 1.06 |
| CGA3E3X7R1E474K080AD | 470,000 | 0.420 | 0.0093 | 1.06 |
| CGA3E3X7R1E474M080AD | 470,000 | 0.420 | 0.0093 | 1.06 |
| CGA3E3X8R1C474K080AD | 470,000 | 0.420 | 0.0103 | 0.212 |
| CGA3E3X8R1C474M080AD | 470,000 | 0.420 | 0.0103 | 0.212 |
| CGA3E1X7R1E684K080AD | 680,000 | 0.420 | 0.0067 | 0.735 |
| CGA3E1X7R1E684M080AD | 680,000 | 0.420 | 0.0067 | 0.735 |
| CGA3E1X7R1E105K080AD | 1,000,000 | 0.420 | 0.0056 | 0.500 |
| CGA3E1X7R1E105M080AD | 1,000,000 | 0.420 | 0.0056 | 0.500 |