

TDK Ceramic Chip Capacitors



TDK SOFT TERMINATION C SERIES

Features:

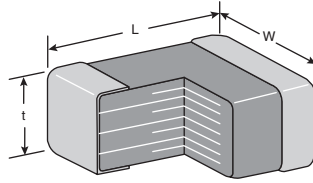
- Improved resistance to thermal shock and thermal cycling
- Improved resistance to mechanical shock and board flex
- High reliability for remote access applications (e.g. telecom base station)
- High temperature/vibration environments (e.g. automotive ECU)

Applications:

- Automotive (battery line)
- Switching power supplies
- Telecom base station
- Power circuits on insulated metal substrates (IMS)



RoHS Compliant This product is RoHS compliant.



| DIMENSIONS: mm | | | |
|----------------|------------|-----------|--------------------|
| Case Size | Length (L) | Width (W) | Max. Thickness (t) |
| 0805 Series | 2.00±0.20 | 1.25±0.20 | 1.45 |
| 1206 Series | 3.20±0.20 | 1.60±0.20 | 1.80 |
| 1210 Series | 3.20±0.20 | 2.50±0.30 | 2.80 |
| 1812 Series | 4.50±0.40 | 3.20±0.40 | 2.50 |
| 2220 Series | 5.70±0.40 | 5.70±0.40 | 3.10 |

Style 0805

For quantities greater than listed, call for quote.

| MOUSER STOCK NO. | TDK Part No. | Value (µF) | Volt (DC) | Tol. (%) | Price Each | | Reel Qty. | Price Per Piece |
|------------------------------|---------------------|------------|-----------|----------|------------|------|-----------|-----------------|
| | | | | | 1 | 100 | | |
| Temperature Coef: X7R | | | | | | | | |
| 810-C2012X7R2E103KST | C2012X7R2E103M/SOFT | 0.01 | 250 | 10 | .09 | .039 | 2000 | .03 |
| 810-C2012X7R2E103MST | C2012X7R2E103M/SOFT | 0.01 | 250 | 20 | .16 | .083 | 2000 | .031 |
| 810-C2012X7R2E223KST | C2012X7R2E223M/SOFT | 0.022 | 250 | 10 | .09 | .061 | 2000 | .048 |
| 810-C2012X7R2E223MST | C2012X7R2E223M/SOFT | 0.022 | 250 | 20 | .26 | .13 | 2000 | .05 |
| 810-C2012X7R1H474KST | C2012X7R1H474K/SOFT | 0.47 | 50 | 10 | .23 | .16 | 2000 | .125 |
| 810-C2012X7R1H474MST | C2012X7R1H474M/SOFT | 0.1 | 50 | 20 | .69 | .345 | 2000 | .132 |
| 810-C2012X7R1H105KST | C2012X7R1H105K/SOFT | 1 | 50 | 10 | .24 | .165 | 2000 | .13 |
| 810-C2012X7R1H105MST | C2012X7R1H105M/SOFT | 1 | 50 | 20 | .71 | .357 | 2000 | .137 |
| 810-C2012X7R1V225KST | C2012X7R1V225K/SOFT | 2.2 | 35 | 10 | .21 | .145 | 2000 | .114 |
| 810-C2012X7R1V225MST | C2012X7R1V225M/SOFT | 2.2 | 35 | 20 | .63 | .315 | 2000 | .121 |
| 810-C2012X7R1C475KST | C2012X7R1C475K/SOFT | 4.7 | 16 | 10 | .25 | .178 | 2000 | .14 |
| 810-C2012X7R1C475MST | C2012X7R1C475M/SOFT | 4.7 | 16 | 20 | .77 | .385 | 2000 | .148 |
| Temperature Coef: X7S | | | | | | | | |
| 810-C2012X7S2A474MST | C2012X7S2A474M/SOFT | 0.1 | 100 | 20 | .50 | .254 | 2000 | .097 |
| 810-C2012X7S2A224KST | C2012X7S2A224K/SOFT | 0.22 | 100 | 10 | .16 | .112 | 4000 | .088 |
| 810-C2012X7S2A224MST | C2012X7S2A224M/SOFT | 0.22 | 100 | 20 | .40 | .202 | 4000 | .078 |
| 810-C2012X7S2A474KST | C2012X7S2A474K/SOFT | 0.47 | 100 | 10 | .17 | .118 | 2000 | .092 |
| 810-C2012X7S2A105KST | C2012X7S2A105K/SOFT | 1 | 100 | 10 | .21 | .149 | 2000 | .117 |
| 810-C2012X7S2A105MST | C2012X7S2A105M/SOFT | 1 | 100 | 20 | .64 | .321 | 2000 | .123 |
| Temperature Coef: X7T | | | | | | | | |
| 810-C2012X7T2W103KST | C2012X7T2W103K/SOFT | 0.01 | 450 | 10 | .09 | .057 | 4000 | .045 |
| 810-C2012X7T2W103MST | C2012X7T2W103M/SOFT | 0.01 | 450 | 20 | .20 | .102 | 4000 | .039 |
| 810-C2012X7T2W223KST | C2012X7T2W223K/SOFT | 0.022 | 450 | 10 | .10 | .073 | 4000 | .054 |
| 810-C2012X7T2W223MST | C2012X7T2W223M/SOFT | 0.022 | 450 | 20 | .31 | .158 | 2000 | .06 |
| 810-C2012X7T2E473KST | C2012X7T2E473K/SOFT | 0.047 | 250 | 10 | .10 | .067 | 2000 | .053 |
| 810-C2012X7T2E473MST | C2012X7T2E473M/SOFT | 0.047 | 250 | 20 | .41 | .167 | 2000 | .058 |
| 810-C2012X7T2W473KST | C2012X7T2W473K/SOFT | 0.047 | 450 | 10 | .11 | .076 | 2000 | .059 |
| 810-C2012X7T2W473MST | C2012X7T2W473M/SOFT | 0.047 | 450 | 20 | .32 | .163 | 2000 | .062 |
| 810-C2012X7T2E104KST | C2012X7T2E104K/SOFT | 0.1 | 250 | 10 | .10 | .073 | 2000 | .057 |
| 810-C2012X7T2E104MST | C2012X7T2E104M/SOFT | 0.1 | 250 | 20 | .31 | .157 | 2000 | .06 |

Style 1206

For quantities greater than listed, call for quote.

| MOUSER STOCK NO. | TDK Part No. | Value (µF) | Volt (DC) | Tol. (%) | Price Each | | Reel Qty. | Price Per Piece |
|------------------------------|---------------------|------------|-----------|----------|------------|------|-----------|-----------------|
| | | | | | 1 | 100 | | |
| Temperature Coef: X7R | | | | | | | | |
| 810-C3216X7R2J103KST | C3216X7R2J103K/SOFT | 0.01 | 630 | 10 | .11 | .075 | 2000 | .059 |
| 810-C3216X7R2J103MST | C3216X7R2J103M/SOFT | 0.01 | 630 | 20 | .33 | .169 | 2000 | .065 |
| 810-C3216X7R2J223KST | C3216X7R2J223K/SOFT | 0.022 | 630 | 10 | .17 | .119 | 2000 | .093 |
| 810-C3216X7R2J223MST | C3216X7R2J223M/SOFT | 0.022 | 630 | 20 | .53 | .271 | 2000 | .103 |
| 810-C3216X7R2E104KST | C3216X7R2E104K/SOFT | 0.1 | 250 | 10 | .26 | .179 | 2000 | .141 |
| 810-C3216X7R2E104MST | C3216X7R2E104M/SOFT | 0.1 | 250 | 20 | .77 | .388 | 2000 | .149 |
| 810-C3216X7R2A474KST | C3216X7R2A474K/SOFT | 0.47 | 100 | 10 | .45 | .315 | 2000 | .247 |
| 810-C3216X7R2A474MST | C3216X7R2A474M/SOFT | 0.47 | 100 | 20 | .76 | .48 | 2000 | .202 |
| 810-C3216X7R1H105KST | C3216X7R1H105K/SOFT | 1 | 50 | 10 | .15 | .105 | 2000 | .082 |
| 810-C3216X7R2A105KST | C3216X7R2A105K/SOFT | 1 | 100 | 10 | .47 | .328 | 2000 | .258 |
| 810-C3216X7R1H105MST | C3216X7R1H105M/SOFT | 1 | 50 | 20 | .45 | .227 | 2000 | .087 |
| 810-C3216X7R2A105MST | C3216X7R2A105M/SOFT | 1 | 100 | 20 | .79 | .49 | 2000 | .213 |
| 810-C3216X7R1H225KST | C3216X7R1H225K/SOFT | 2.2 | 50 | 10 | .60 | .42 | 2000 | .33 |
| 810-C3216X7R1H225MST | C3216X7R1H225M/SOFT | 2.2 | 50 | 20 | 1.81 | .909 | 2000 | .349 |
| 810-C3216X7R1V475KST | C3216X7R1V475K/SOFT | 4.7 | 35 | 10 | .39 | .271 | 2000 | .212 |
| 810-C3216X7R1V475MST | C3216X7R1V475M/SOFT | 4.7 | 35 | 20 | .65 | .403 | 2000 | .169 |
| 810-C3216X7R1E106KST | C3216X7R1E106K/SOFT | 10 | 25 | 10 | .66 | .463 | 2000 | .364 |
| 810-C3216X7R1E106MST | C3216X7R1E106M/SOFT | 10 | 25 | 20 | 1.11 | .68 | 2000 | .28 |
| Temperature Coef: X7S | | | | | | | | |
| 810-C3216X7S2A225MST | C3216X7S2A225K/SOFT | 2.2 | 100 | 10 | 1.28 | .81 | 2000 | .34 |
| 810-C3216X7S2A225MST | C3216X7S2A225M/SOFT | 2.2 | 100 | 20 | 1.28 | .81 | 2000 | .34 |
| Temperature Coef: X7T | | | | | | | | |
| 810-C3216X7T2E224KST | C3216X7T2E224K/SOFT | 0.022 | 250 | 10 | .24 | .166 | 2000 | .131 |
| 810-C3216X7T2J473KST | C3216X7T2J473K/SOFT | 0.047 | 630 | 10 | .24 | .168 | 2000 | .133 |
| 810-C3216X7T2J473MST | C3216X7T2J473M/SOFT | 0.047 | 630 | 20 | .72 | .364 | 2000 | .14 |
| 810-C3216X7T2W104KST | C3216X7T2W104K/SOFT | 0.1 | 450 | 10 | .25 | .174 | 2000 | .136 |
| 810-C3216X7T2W104MST | C3216X7T2W104M/SOFT | 0.1 | 450 | 20 | .60 | .315 | 2000 | .12 |
| 810-C2012X7T2E104MST | C2012X7T2E104M/SOFT | 0.1 | 250 | 20 | .31 | .157 | 2000 | .06 |
| 810-C3216X7T2E224MST | C3216X7T2E224M/SOFT | 0.22 | 250 | 20 | .58 | .302 | 2000 | .119 |

Style 1210

For quantities greater than listed, call for quote.

| MOUSER STOCK NO. | TDK Part No. | Value (µF) | Volt (DC) | Tol. (%) | Price Each | | Reel Qty. | Price Per Piece |
|------------------------------|---------------------|------------|-----------|----------|------------|------|-----------|-----------------|
| | | | | | 1 | 100 | | |
| Temperature Coef: X7R | | | | | | | | |
| 810-C3225X7R2J473KST | C3225X7R2J473K/SOFT | 0.047 | 630 | 10 | .44 | .307 | 1000 | .257 |
| 810-C3225X7R2J473MST | C3225X7R2J473M/SOFT | 0.047 | 630 | 20 | .73 | .457 | 1000 | .276 |
| 810-C3225X7R2E104KST | C3225X7R2E104K/SOFT | 0.1 | 250 | 10 | .28 | .195 | 1000 | .163 |
| 810-C3225X7R2E104MST | C3225X7R2E104M/SOFT | 0.1 | 250 | 20 | .52 | .334 | 1000 | .202 |
| 810-C3225X7R2E224KST | C3225X7R2E224K/SOFT | 0.22 | 250 | 10 | .44 | .307 | 1000 | .257 |
| 810-C3225X7R2E224MST | C3225X7R2E224M/SOFT | 0.22 | 250 | 20 | .73 | .457 | 1000 | .276 |
| 810-C3225X7R2A225KST | C3225X7R2A225K/SOFT | 2.2 | 100 | 10 | .81 | .568 | 1000 | .475 |
| 810-C3225X7R2A225MST | C3225X7R2A225M/SOFT | 2.2 | 100 | 20 | 1.36 | .846 | 1000 | .511 |
| Temperature Coef: X7S | | | | | | | | |
| 810-C3225X7S1H475KST | C3225X7S1H475K/SOFT | 4.7 | 50 | 10 | 1.21 | .847 | 1000 | .708 |
| 810-C3225X7S2A475KST | C3225X7S2A475K/SOFT | 4.7 | 100 | 10 | 1.46 | 1.02 | 1000 | .855 |
| 810-C3225X7S1H475MST | C3225X7S1H475M/SOFT | 4.7 | 50 | 20 | 2.03 | 1.26 | 1000 | .764 |
| 810-C3225X7S2A475MST | C3225X7S2A475M/SOFT | 4.7 | 100 | 20 | 2.45 | 1.52 | 1000 | .922 |
| 810-C3225X7S1H106KST | C3225X7S1H106K/SOFT | 10 | 50 | 10 | 1.27 | .89 | 1000 | .744 |
| 810-C3225X7S1H106MST | C3225X7S1H106M/SOFT | 10 | 50 | 20 | 2.14 | 1.32 | 1000 | .802 |
| Temperature Coef: X7T | | | | | | | | |
| 810-C3225X7T2J104KST | C3225X7T2J104K/SOFT | 0.1 | 630 | 10 | .47 | .327 | 2000 | .257 |
| 810-C3225X7T2J104MST | C3225X7T2J104M/SOFT | 0.1 | 630 | 20 | .79 | .49 | 2000 | .213 |
| 810-C3225X7T2W224KST | C3225X7T2W224K/SOFT | 0.22 | 450 | 10 | .55 | .385 | 1000 | .322 |
| 810-C3225X7T2W224MST | C3225X7T2W224M/SOFT | 0.22 | 450 | 20 | .92 | .574 | 1000 | .346 |

Style 1812

For quantities greater than listed, call for quote.

| MOUSER STOCK NO. | TDK Part No. | Value (µF) | Volt (DC) | Tol. (%) | Price Each | | Reel Qty. | Price Per Piece |
|------------------------------|---------------------|------------|-----------|----------|------------|------|-----------|-----------------|
| | | | | | 1 | 100 | | |
| Temperature Coef: X7R | | | | | | | | |
| 810-C4532X7R2E474MST | C4532X7R2E474M/SOFT | 0.1 | 250 | 20 | 1.13 | .706 | 500 | .568 |
| 810-C4532X7T2J224KST | C4532X7T2J224K/SOFT | 0.22 | 250 | 10 | 1.13 | .789 | 1000 | .66 |
| 810-C4532X7R2E474KST | C4532X7R2E474K/SOFT | 0.47 | 250 | 10 | .68 | .473 | 500 | .43 |
| Temperature Coef: X7T | | | | | | | | |
| 810-C4532X7T2J224MST | C4532X7T2J224M/SOFT | 0.22 | 630 | 20 | 1.89 | 1.17 | 1000 | .711 |
| 810-C4532X7T2W474KST | C4532X7T2W474K/SOFT | 0.47 | 450 | 10 | 1.29 | .899 | 500 | .817 |
| 810-C4532X7T2W474MST | C4532X7T2W474M/SOFT | 0.47 | 450 | 20 | 2.16 | 1.34 | 500 | 1.08 |
| 810-C4532X7T2E105KST | C4532X7T2E105K/SOFT | 1 | 250 | 10 | 1.35 | .942 | 500 | .856 |
| 810-C4532X7T2E105MST | C4532X7T2E105M/SOFT | 1 | 250 | 20 | 2.26 | 1.40 | 500 | 1.13 |

Style 2220

For quantities greater than listed, call for quote.

| MOUSER STOCK NO. | TDK Part No. | Value (µF) | Volt (DC) | Tol. (%) | Price Each | | Reel Qty. | Price Per Piece |
|------------------------------|---------------------|------------|-----------|----------|------------|------|-----------|-----------------|
| | | | | | 1 | 100 | | |
| Temperature Coef: X7R | | | | | | | | |
| 810-C5750X7R2E105KST | C5750X7R2E105K/SOFT | 1 | 250 | 10 | 1.38 | .963 | 500 | .875 |
| 810-C5750X7R2E105MST | C5750X7R2E105M/SOFT | 1 | 250 | 20 | 2.31 | 1.43 | 500 | 1.15 |
| Temperature Coef: X7S | | | | | | | | |
| 810-C5750X7S2A106KST | C5750X7S2A106K/SOFT | 10 | 100 | | | | | |