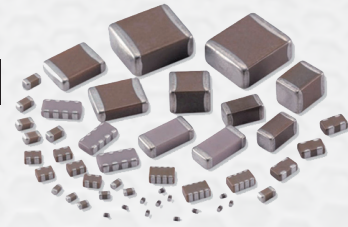


Übersicht High Capacitors größer 1µF

Vielschicht-Chipkondensatoren als Alternative zu Tantalkondensatoren

- Vorteile:**
- besseres Impulsverhalten
 - attraktives Preis-Leistungsverhältnis
 - höhere Durchbruchspannung
 - konstante Verfügbarkeit
 - verpolungssicher
 - geringere Ausfallrate
 - höherer Isolationswiderstand



Durch niedrigen ESR und geringere Impedanz des Keramik Kondensators reicht für den Einsatz als Entstörkondensator (Bypassing und Decoupling) meist ein Bruchteil der Kapazität eines Tantalkondensators.

**Kondensatoren ohne GUDECO-Nr. sind Neuentwicklungen unserer Hersteller - Muster gerne auf Anfrage.
Neudesign nur nach Rücksprache mit GUDECO.**

Temperaturbereiche:
 R7(Murata)/B(Samsung) = X7R (-55° bis +125°C) 10% Tol.
 R6(Murata)/A(Samsung) = X5R (-55° bis +85°C) 15% Tol.
 F5(Murata)/F(Samsung) = Y5V (-30° bis +85°C) -20+80% Tol.

Artikel mit ★ sind
LAGERARTIKEL
 Erweiterung nach Kundenbedarf

| Bauform | Kapazität (µF) | Spannung (V) | Keramik | Murata | | | Samsung | | |
|---------|----------------|--------------|---------|-----------------------|--------------|--------|-----------------------|--------------|--------|
| | | | | Herstellerbezeichnung | Lagerartikel | VPE | Herstellerbezeichnung | Lagerartikel | VPE |
| 0201 | 1 | 6,3 | X5R | | ★ | 15.000 | CL03A105KQ3CSNH | | 15.000 |
| 0402 | 1 | 6,3 | X5R | GRM155R60J105KE19D | ★ | 10.000 | CLA05A105KQ5NNNC | ★ | 10.000 |
| 0402 | 1 | 10 | X5R | GRM155R61A105KE15D | ★ | 10.000 | CL05A105KP5NNNC | ★ | 10.000 |
| 0402 | 1 | 16 | X5R | GRM155R61C105KA12 | | | CL05A105K05NNNC | | 10.000 |
| 0402 | 1 | 25 | X5R | | | | CL05A105KA5NQNC | | |
| 0402 | 2,2 | 4 | X5R | GRM155R60G225ME15D | ★ | 10.000 | | | |
| 0402 | 2,2 | 6,3 | X5R | GRM155R60J225ME15D | ★ | 10.000 | CL05A225MQ5NNNC | | 10.000 |
| 0402 | 2,2 | 10 | X5R | | | | CL05A225MP5NSNC | | 10.000 |
| 0402 | 2,2 | 16 | X5R | | | | CL05A225K05NQNC | | 10.000 |
| 0402 | 4,7 | 4 | X5R | GRM155R60G475ME47 | | 10.000 | CL05A475MR5NQNC | | 10.000 |
| 0402 | 10 | 4 | X5R | GRM155R60G106ME44 | | | CL05A106MR5NRNC | | 10.000 |
| 0603 | 1 | 6,3 | X7R | GRM188R70J105KA01D | ★ | 4.000 | | | |
| 0603 | 1 | 10 | X5R | GRM188R61A105KA61D | ★ | 4.000 | CL10A105KP8NNNC | ★ | 10.000 |
| 0603 | 1 | 10 | X7R | GRM188R71A105KA61D | ★ | 4.000 | | | |
| 0603 | 1 | 16 | X5R | GRM188R61C105KA12D | ★ | 4.000 | CL10A105K08NNNC | ★ | 4.000 |
| 0603 | 1 | 16 | X7R | GRM188R71C105KA12D | ★ | 4.000 | CL10B105K08NNC | ★ | 4.000 |
| 0603 | 1 | 16 | Y5V | GRM188F51C105ZA01D | ★ | 4.000 | | | |
| 0603 | 1 | 25 | X5R | GRM188R61E105KA12D | ★ | 4.000 | CL10A105KA8NNNC | ★ | 4.000 |
| 0603 | 1 | 25 | X7R | GRM188R71E105KA12D | ★ | 4.000 | | | |
| 0603 | 2,2 | 6,3 | X5R | GRM188R60J225KE19D | ★ | 4.000 | | | |
| 0603 | 2,2 | 6,3 | X7R | | | | CL10B225KQ8NNNC | | 4.000 |
| 0603 | 2,2 | 10 | X5R | GRM188R61A225KE34D | ★ | 4.000 | CL10A225KP8NNNC | ★ | 4.000 |
| 0603 | 2,2 | 10 | X7R | GRM188R71A225KE15D | ★ | 4.000 | CL10F105Z08NNNC | ★ | 4.000 |
| 0603 | 2,2 | 10 | Y5V | GRM188F51A225ZE01D | ★ | 4.000 | | | |
| 0603 | 2,2 | 16 | X5R | GRM188R61C225KE15D | ★ | 4.000 | CL10A225K08NNNC | ★ | 4.000 |
| 0603 | 3,3 | 10 | X5R | GRM188R61A335KE15D | ★ | 4.000 | | | |
| 0603 | 4,7 | 6,3 | X5R | GRM188R60J475KE19D | ★ | 4.000 | CL10A475KQ8NNNC | ★ | 4.000 |
| 0603 | 4,7 | 10 | X5R | GRM188R61A475KE15 | | | CL10A475KP8NNNC | | 4.000 |
| 0603 | 4,7 | 16 | X5R | | | | CL10A475K08NNNC | ★ | 4.000 |
| 0603 | 10 | 4 | X5R | GRM188R60G106ME47D | ★ | 4.000 | | | |
| 0603 | 10 | 6,3 | X5R | GRM188R60J106ME47D | ★ | 4.000 | CL10A106KMQ8NNNC | ★ | 4.000 |
| 0603 | 10 | 10 | X5R | | | | CL10A106KP8NNNC | ★ | 4.000 |
| 0603 | 22 | 4 | X5R | GRM188R60G226ME69 | | | CL10A226MR8NQNC | | 4.000 |
| 0603 | 22 | 6,3 | X5R | | | | CL10A226MQ8NRNC | ★ | 4.000 |

Übersicht High Capacitors größer 1µF

| Bauform | Kapazität (µF) | Spannung (V) | Keramik | Murata | | | Samsung | | |
|---------|----------------|--------------|---------|-----------------------|--------------|-------|-----------------------|--------------|-------|
| | | | | Herstellerbezeichnung | Lagerartikel | VPE | Herstellerbezeichnung | Lagerartikel | VPE |
| 0805 | 1 | 16 | X7R | GRM21BR71C105KA01L | ★ | 3.000 | CL21B105KOFNNE | ★ | 2.000 |
| 0805 | 1 | 16 | Y5V | GRM21BF51C105ZA01L | ★ | 3.000 | CL21F105ZOCNNC | ★ | 4.000 |
| 0805 | 1 | 25 | X5R | GRM216R61E105KA12D | ★ | 4.000 | | | |
| 0805 | 1 | 25 | X7R | GRM21BR71E105KA99L | ★ | 3.000 | CL21B105KAFNNE | ★ | 2.000 |
| 0805 | 1 | 25 | Y5V | GRM219F51H105ZA01D | ★ | 3.000 | | | |
| 0805 | 1 | 50 | X7R | GRM21BR71H105KA12L | ★ | 3.000 | CL21B105KBFNNE | ★ | 2.000 |
| 0805 | 1 | 50 | Y5V | GRM219F51H105ZA01D | ★ | 4.000 | CL21F105ZBFNNE | ★ | 2.000 |
| 0805 | 2,2 | 10 | X7R | GRM21BR71A225KA01L | ★ | 3.000 | | | |
| 0805 | 2,2 | 16 | X7R | GRM21BR71C225KA12L | ★ | 3.000 | CL21B225KOFNNE | ★ | 2.000 |
| 0805 | 2,2 | 16 | Y5V | GRM21BF51C225ZA01L | ★ | 3.000 | | | |
| 0805 | 2,2 | 25 | X5R | GRM21BR61E225KA12L | ★ | 3.000 | | | |
| 0805 | 2,2 | 25 | X7R | GRM21BR71E225KA73L | ★ | 3.000 | CL21B225KAFNNE | | 2.000 |
| 0805 | 2,2 | 25 | Y5V | GRM21BF51E225ZA01L | ★ | 3.000 | | | |
| 0805 | 3,3 | 10 | X5R | GRM21BR61E335KA12L | ★ | | | | |
| 0805 | 3,3 | 25 | X5R | GRM21BR61E335KA12L | ★ | 3.000 | | | |
| 0805 | 4,7 | 6,3 | X5R | GRM21BR60J475KA11L | ★ | 3.000 | CL21A475KQFNNE | ★ | 2.000 |
| 0805 | 4,7 | 10 | X7R | GRM21BR71A475KA73L | ★ | 3.000 | | | |
| 0805 | 4,7 | 10 | X5R | GRM21BR61A475KA73L | ★ | 3.000 | CL21A475KPFNNE | ★ | 2.000 |
| 0805 | 4,7 | 10 | Y5V | GRM21BF51A475ZA01L | ★ | 3.000 | | | |
| 0805 | 4,7 | 16 | X5R | GRM21BR61C475KA88 | ★ | 3.000 | CL21A475KOFNNE | ★ | 2.000 |
| 0805 | 4,7 | 16 | X7R | GRM21BR71C475KA73L | ★ | 3.000 | CL21B475KO***** | | |
| 0805 | 4,7 | 16 | Y5V | GRM21BF51C475ZA12L | ★ | 3.000 | | | |
| 0805 | 4,7 | 25 | X5R | GRM21BR61E475KA12L | ★ | 3.000 | CL21A475KAQNNE | ★ | 2.000 |
| 0805 | 10 | 6,3 | X7R | GRM21BR70J106KE76 | | | CL21B106KQNNNE | | 2.000 |
| 0805 | 10 | 6,3 | X5R | GRM21BR60J106KE19L | ★ | 3.000 | CL21A106KQFNNE | ★ | 2.000 |
| 0805 | 10 | 6,3 | Y5V | GRM21BF50J106ZE01L | ★ | 3.000 | | | |
| 0805 | 10 | 10 | X5R | GRM21BR61A106KE19L | ★ | 3.000 | CL21A106KPFNNE | ★ | 2.000 |
| 0805 | 10 | 10 | X7R | GRM21BR71A106KE51L | ★ | 3.000 | CL21B106KQNNNE | ★ | 2.000 |
| 0805 | 10 | 16 | X5R | GRM21BR61C106KE15L | ★ | 3.000 | CL21A106KOFNNE | ★ | 2.000 |
| 0805 | 10 | 25 | X5R | GRM21BR61E106KA73 | | | CL21A106KAYNNE | | |
| 0805 | 22 | 6,3 | X5R | GRM21BR60J226ME39L | ★ | 3.000 | CL21A226MQNNNE | ★ | 2.000 |
| 0805 | 22 | 10 | X5R | | | | CL21A226MPCLRNC | ★ | 4.000 |
| 0805 | 47 | 4 | X5R | GRM21BR60G476ME15L | ★ | 3.000 | CL21A476MRYNNE | ★ | 2.000 |
| 0805 | 47 | 6,3 | X5R | | | | CL21A476MQYNNE | ★ | 2.000 |
| | | | | | | | | | |
| 1206 | 1 | 16 | X7R | GRM319R71C105KAA3L | ★ | 4.000 | CL31B105KOFNNE | ★ | 2.000 |
| 1206 | 1 | 25 | X7R | GRM31MR71E105KA01L | ★ | 3.000 | CL31B105KAHNNE | ★ | 2.000 |
| 1206 | 1 | 25 | Y5V | GRM31MF51E105ZA01L | ★ | 3.000 | | | |
| 1206 | 1 | 50 | X7R | GRM31MR71H105KA88L | ★ | 3.000 | CL31B105KBHNNE | ★ | 2.000 |
| 1206 | 1 | 50 | Y5V | | | | CL31F105ZBFNNE | ★ | 2.000 |
| 1206 | 1 | 100 | X7R | GRM31CR72A105KA01L | ★ | 2.000 | CL31B105KCHNNE | ★ | 2.000 |
| 1206 | 1,5 | 16 | X7R | GRM31MR71C155KA35 | ★ | 3.000 | | | |
| 1206 | 2,2 | 10 | X5R | GRM319R61A225KA01D | | 3.000 | | | |
| 1206 | 2,2 | 16 | X7R | GRM31MR71C225KA35L | ★ | 3.000 | | | |
| 1206 | 2,2 | 25 | X7R | GRM31MR71E225KA93L | ★ | 3.000 | CL31B225KAHNNE | ★ | 2.000 |
| 1206 | 2,2 | 25 | Y5V | GRM31MF51E225ZA12L | ★ | 3.000 | CL31F225ZAFNNE | ★ | 2.000 |
| 1206 | 2,2 | 50 | X7R | GRM31CR71H225KA88L | ★ | 2.000 | CL31B225KBHNNE | | 2.000 |
| 1206 | 2,2 | 100 | X7R | GRM31CR72A225*** | | | CL31B225KC***** | | |

Übersicht High Capacitors größer 1µF

| Bauform | Kapazität (µF) | Spannung (V) | Keramik | Murata | | | Samsung | | |
|---------|----------------|--------------|---------|-----------------------|--------------|-------|-----------------------|--------------|-------|
| | | | | Herstellerbezeichnung | Lagerartikel | VPE | Herstellerbezeichnung | Lagerartikel | VPE |
| 1206 | 3,3 | 16 | X7R | GRM31CR71E335KA88L | ★ | 2.000 | | | |
| 1206 | 3,3 | 25 | X7R | GRM31CR71E335KA88L | ★ | 2.000 | | | |
| 1206 | 4,7 | 16 | X7R | GRM31CR71C475KA01L | ★ | 2.000 | CL31B475KOHNNNE | ★ | 2.000 |
| 1206 | 4,7 | 16 | X5R | GRM31CR61C475KA01L | ★ | 2.000 | | | |
| 1206 | 4,7 | 16 | Y5V | GRM31MF51C475ZA01L | ★ | 3.000 | CL31F475ZOFNNNE | ★ | 2.000 |
| 1206 | 4,7 | 25 | X5R | GRM31CR61E475KA88L | ★ | 2.000 | | | |
| 1206 | 4,7 | 25 | X7R | GRM31CR71E475KA88L | ★ | 2.000 | CL31B475KAHNNNE | ★ | 2.000 |
| 1206 | 4,7 | 50 | X7R | GRM31CR71H475KA12L | ★ | 2.000 | CL31B475KBHNNNE | | 2.000 |
| 1206 | 4,7 | 50 | Y5V | GRM31CF51H475ZA01L | ★ | 2.000 | | | |
| 1206 | 10 | 6,3 | X7R | GRM31CR70J106KA01L | ★ | 4.000 | | | |
| 1206 | 10 | 10 | X7R | GRM31CR71A106KA01L | ★ | 2.000 | | | |
| 1206 | 10 | 10 | Y5V | GRM31MF51A106ZA01L | ★ | 3.000 | | | |
| 1206 | 10 | 16 | X7R | GRM31CR71C106KA12L | ★ | 2.000 | CL31B106KOHNNNE | ★ | 2.000 |
| 1206 | 10 | 16 | X5R | GRM31CR61C106KC31L | ★ | 2.000 | CL31A106KOHNNNE | ★ | 2.000 |
| 1206 | 10 | 16 | Y5V | | | | CL31F106ZOHNNNE | ★ | 2.000 |
| 1206 | 10 | 25 | X5R | GRM31CR61E106KA12L | ★ | 2.000 | CL31A106KAHNNNE | ★ | 2.000 |
| 1206 | 10 | 25 | X7R | GRM31CR71E106KA12L | ★ | 2.000 | CL31B106KAHNNNE | | 2.000 |
| 1206 | 10 | 25 | Y5V | GRM31CF51E106ZA01L | ★ | 2.000 | | | |
| 1206 | 22 | 6,3 | X7R | GRM31CR70J226KE19 | ★ | | CL31B226KQ**** | | |
| 1206 | 22 | 6,3 | X5R | GRM31CR60J226KE19L | ★ | 2.000 | | | |
| 1206 | 22 | 10 | X7R | GRM31CR71A226KE15L | ★ | 2.000 | CL31B226KP**** | | |
| 1206 | 22 | 10 | X5R | GRM31CR61A226KE19 | | | CL31A226KPHNNNE | | 2.000 |
| 1206 | 22 | 10 | Y5V | GRM31CF51A226ZE01L | ★ | 2.000 | CL31F226ZPHNNNE | ★ | 2.000 |
| 1206 | 22 | 16 | X5R | GRM31CR61C226ME15L | ★ | 2.000 | CL31A226KOC LNNC | ★ | 4.000 |
| 1206 | 22 | 25 | X5R | GRM31CR61E226K*** | | | CL31A226KA**** | | |
| 1206 | 47 | 6,3 | X5R | GRM31CR60J476ME19L | ★ | 2.000 | CL31A476MQHNNNE | ★ | 2.000 |
| 1206 | 47 | 10 | X5R | GRM31CR61A476M*** | | | CL31A476MP**** | | |
| 1206 | 100 | 6,3 | X5R | GRM31CR60J107ME39L | ★ | 2.000 | CL31A107MQHNNNE | | 2.000 |
| 1206 | 100 | 6,3 | Y5V | GRM31CF50J107ZE01L | ★ | GR | | | |
| 1210 | 1 | 50 | X7R | GRM32RR71H105KA01L | ★ | 1.000 | CL32B105KBHNNNE | ★ | 2.000 |
| 1210 | 1 | 100 | X7R | GRM32ER72A105KA01L | ★ | 1.000 | CL32B105KCJNNNE | ★ | 2.000 |
| 1210 | 2,2 | 16 | X7R | GRM32MR71C225KA01L | ★ | 3.000 | | | |
| 1210 | 2,2 | 25 | X7R | GRM32RR71E225KA01L | ★ | 1.000 | CL32B225KAINNNE | ★ | 2.000 |
| 1210 | 2,2 | 100 | X7R | GRM32ER72A225KA35L | ★ | 1.000 | | | |
| 1210 | 3,3 | 50 | X7R | GRM32DR71H335KA88L | ★ | 1.000 | | | |
| 1210 | 4,7 | 16 | X7R | GRM32RR71C475KA01L | ★ | 1.000 | | | |
| 1210 | 4,7 | 25 | X5R | GRM32RR61E475KA12L | ★ | 1.000 | | | |
| 1210 | 4,7 | 25 | X7R | GRM32DR71E475KA61L | ★ | 1.000 | | | |
| 1210 | 4,7 | 25 | Y5V | | | | CL32F475ZAHNNNE | ★ | 2.000 |
| 1210 | 4,7 | 50 | X7R | GRM32ER71H475KA88L | ★ | 1.000 | CL32B475KBUYNNE | ★ | 2.000 |
| 1210 | 10 | 16 | X7R | GRM32DR71C106KA01L | ★ | 1.000 | CL32B106KOJNNNE | ★ | 1.000 |
| 1210 | 10 | 16 | X5R | GRM32DR61C106KA01L | ★ | | | | |
| 1210 | 10 | 25 | X5R | GRM32DR61E106KA12L | ★ | 1.000 | | | |
| 1210 | 10 | 25 | X7R | GRM32DR71E106KA12L | ★ | 1.000 | CL32B106KAJNNNE | ★ | 1.000 |
| 1210 | 10 | 25 | Y5V | GRM32NF51E106ZA01L | ★ | 2.000 | CL32F106ZAHNNNE | ★ | 2.000 |
| 1210 | 10 | 35 | X7R | GRM32ER7YA106KA12 | ★ | 1.000 | CL32B106KLULNNE | ★ | 2.000 |
| 1210 | 10 | 35 | Y5V | | | | CL32F106ZLHNNNE | ★ | 2.000 |

Übersicht High Capacitors größer 1µF

| Bauform | Kapazität (µF) | Spannung (V) | Keramik | Murata | | | Samsung | | |
|---------|----------------|--------------|---------|-----------------------|--------------|-------|-----------------------|--------------|-------|
| | | | | Herstellerbezeichnung | Lagerartikel | VPE | Herstellerbezeichnung | Lagerartikel | VPE |
| 1210 | 10 | 50 | X7R | GRM32ER71H106KA12L | | 1.000 | CL32B106KB**** | | |
| 1210 | 10 | 50 | Y5V | GRM32DF51H106ZA01L | ★ | 1.000 | | | |
| 1210 | 22 | 10 | X5R | GRM32ER61A226KA65L | ★ | 2.000 | CL32A226KPJNNNE | ★ | 1.000 |
| 1210 | 22 | 10 | X7R | GRM32ER71A226KE20L | ★ | 1.000 | | | |
| 1210 | 22 | 10 | Y5V | GRM32CF51A226ZA01L | ★ | 2.000 | | | |
| 1210 | 22 | 16 | X7R | GRM32ER71C226ME18L | ★ | 1.000 | CL32B226KOJNNNE | | 1.000 |
| 1210 | 22 | 16 | X5R | GRM32ER61C226KE20L | ★ | 1.000 | CL32A226KOJNNNE | ★ | 1.000 |
| 1210 | 22 | 16 | Y5V | GRM32CF51C226ZA12L | ★ | 2.000 | | | |
| 1210 | 22 | 25 | X5R | GRM32ER61E226ME15L | ★ | 1.000 | CL32A226KAJNNNE | ★ | 1.000 |
| 1210 | 22 | 25 | X7R | GRM32ER71E226KE15L | ★ | 1.000 | CL32B226KAJNNNE | | 1.000 |
| 1210 | 47 | 6,3 | X5R | GRM32ER60J476ME20L | ★ | 1.000 | CL32A476MQJNNNE | ★ | 1.000 |
| 1210 | 47 | 10 | X7R | GRM32ER71A476ME15L | ★ | 1.000 | CL32B476KP**** | | |
| 1210 | 47 | 10 | X5R | GRM32ER61A476KE20L | ★ | 1.000 | CL32A476MP**** | | |
| 1210 | 47 | 16 | X5R | GRM32ER61C476KE15L | ★ | 1.000 | CL32A476MO**** | | |
| 1210 | 100 | 6,3 | X5R | GRM32ER60J107ME20L | ★ | 1.000 | CL32A107MQVNNNE | ★ | 2.000 |
| 1812 | 1,0 | 50 | X7R | | | | CL43B105KBFNNNE | ★ | 1.000 |
| 1812 | 2,2 | 50 | X7R | GRM43ER71H225KA01L | ★ | 500 | | | |
| 1812 | 2,2 | 100 | X7R | GRM43ER72A225KA01L | ★ | 1.000 | | | |
| 1812 | 4,7 | 25 | X7R | GRM43ER71E475KA01L | ★ | 500 | | | |
| 1812 | 10 | 25 | X7R | | | | CL43B106KALNNNF | ★ | 2.000 |
| 1812 | 10 | 25 | X5R | GRM43DR61E106KA12L | ★ | 1.000 | | | |
| 1812 | 22 | 10 | X7R | GRM43ER71A226KE01L | ★ | 500 | | | |
| 1812 | 22 | 16 | X5R | GRM43ER61C226KE01L | ★ | 500 | | | |
| 1812 | 47 | 10 | X5R | GRM43ER61A476KE19L | ★ | 1.000 | | | |
| 1812 | 100 | 6,3 | X5R | GRM43SR60J107ME20L | ★ | 500 | | | |
| 2220 | 1 | 50 | X7R | | | 1.000 | CL55B105KBINNNF | ★ | 2.000 |
| 2220 | 1 | 100 | X7R | GRM55DR72A105KA01L | ★ | 1.000 | | | |
| 2220 | 1 | 250 | X7R | GRM55DR72E105KW01L | ★ | 1.000 | | | |
| 2220 | 1,5 | 50 | X7R | GRM55RR71H155KA01L | ★ | 1.000 | | | |
| 2220 | 4,7 | 50 | X7R | GRM55ER71H475KA01L | ★ | 1.000 | | | |
| 2220 | 4,7 | 100 | X7R | GRM55ER72A475KA01L | ★ | 500 | CL55B475KCJNNNE | ★ | 2.000 |
| 2220 | 10 | 50 | X5R | GRM55DR61H106KA88L | ★ | 1.000 | | | |
| 2220 | 15 | 25 | X7R | GRM55ER71E156KA01L | ★ | 500 | | | |
| 2220 | 100 | 6,3 | X5R | GRM55FR60J107KA01L | ★ | 500 | | | |