

GRM series / Hi-Cap (1uF and over)

Features

1. TA chip capacitor replacement product lineup is available in **X7R (X7S, X7T, X7U), X6S(X6T) and X5R** temperature characteristics with a capacitance of **1uF and larger**.
2. The line of high volumetric capacitance ceramic chip capacitors is available in 2.5V,4V, 6.3V, 10V, 16V, 25V, 35V,50V and 100V.
3. No polarity.
4. GRM series is offered with a Ni barrier termination plated with Matte Tin, and is RoHS compliant.
5. Stringent dimensional tolerances allow highly reliable, high-speed automatic chip placement on PCBs.

Global Part Numbering

GR M 18 8 R6 0J 105 K A01 D
-1- -2- -3- -4- -5- -6- -7- -8- -9- -10-

-1-:Product ID

| Code | Product |
|------|---------|
| GR | MLCC |

-2-:Series

| Code | Product |
|------|------------------------|
| M | Tin Plated Termination |

-3-:Dimension (LxW)

| Code | Dimension (LxW) |
|------|-----------------------|
| 15 | 1.0x0.5mm (EIA:0402) |
| 18 | 1.6x0.8mm (EIA:0603) |
| 21 | 2.0x1.25mm (EIA:0805) |
| 31 | 3.2x1.6mm (EIA:1206) |
| 32 | 3.2x2.5mm (EIA:1210) |

-4-:Dimension (T)

| Code | Dimension (T) |
|------|---------------|
| 3 | 0.33mm |
| 5 | 0.5mm |
| 6 | 0.6mm |
| 8 | 0.8mm |
| 9 | 0.85mm |
| A | 1.0mm |
| M | 1.15mm |
| B | 1.25mm |
| N | 1.35mm |
| C | 1.6mm |
| R | 1.8mm |
| D | 2.0mm |
| E | 2.5mm |

-5-:Temperature Characteristics

| Code | TC | Temp. Range | Cap. Change | Operating Temp. |
|------|-----|-------------|-------------|-----------------|
| R7 | X7R | -55 to 125C | +/-15% | -55 to 125C |
| C7 | X7S | | +/-22% | |
| D7 | X7T | | +22/-33% | |
| E7 | X7U | | +22/-56% | |
| C8 | X6S | -55 to 105C | +/-22% | -55 to 105C |
| D8 | X6T | | +22/-33% | |
| R6 | X5R | -55 to 85C | +/-15% | -55 to 85C |

-6-:Rated Voltage

| Code | Rated Voltage |
|------|---------------|
| 0A | DC 2.5V |
| 0G | DC 4V |
| 0J | DC 6.3V |
| 1A | DC 10V |
| 1C | DC 16V |
| 1E | DC 25V |
| YA | DC 35V |
| 1H | DC 50V |
| 2A | DC 100V |

-7-:Capacitance

| Code | Capacitance |
|------|-------------|
| 105 | 1uF |
| 106 | 10uF |
| 107 | 100uF |

-8-:Capacitance Tolerance

| Code | Cap. Tol. | TC |
|------|-----------|---------------|
| K | +/-10% | X7_, X6_, X5R |
| M | +/-20% | X7_, X6_, X5R |

-9-:Individual Specification Code

-10-:Packaging

| Code | Packaging |
|------|-----------------------|
| D | Φ178mm Paper Taping |
| L | Φ178mm Plastic Taping |
| J | Φ330mm Paper Taping |
| K | Φ330mm Plastic Taping |

GRM series / Hi-Cap (1uF and over)

Chip size and Capacitance range

< X7R (X7S, X7T, X7U) >

Mass Production Under Development

| Type | Size | WV | Capacitance Value (uF) | | | | | | |
|-------|------|-----|------------------------|-----|-----|-----|-----|-----|-----|
| | | | 1 | 2.2 | 4.7 | 10 | 22 | 47 | 100 |
| GRM18 | 0603 | 25 | X7R | | | | | | |
| | | 16 | X7R | | | | | | |
| | | 10 | X7R | X7R | | | | | |
| | | 6.3 | X7R | X7S | | | | | |
| GRM21 | 0805 | 50 | X7R | | | | | | |
| | | 25 | X7R | X7R | | | | | |
| | | 16 | | X7R | X7R | | | | |
| | | 10 | | X7R | X7R | X7R | | | |
| GRM31 | 1206 | 6.3 | | | | X7R | | | |
| | | 100 | X7R | X7S | | | | | |
| | | 50 | X7R | X7R | X7R | | | | |
| | | 35 | | | | X7S | | | |
| | | 25 | | | | X7R | | | |
| | | 16 | | X7R | X7R | X7R | | | |
| | | 10 | | | | X7R | X7R | | |
| GRM32 | 1210 | 6.3 | | | | X7R | X7R | | |
| | | 4 | | | | | X7S | X7U | |
| | | 100 | X7R | X7R | | | | | |
| | | 50 | | | X7R | | | | |
| | | 35 | | | | X7R | | | |
| | | 25 | | | X7R | | X7R | | |
| | | 16 | | | | X7R | X7R | | |
| 10 | | | | | X7R | X7R | | | |
| | | | | | | | X7R | | |
| | | | | | | | | X7R | |
| | | | | | | | | | X7U |

< X6S(X6T) >

| Type | Size | WV | 1 | 2.2 | 4.7 | 10 | 22 | 47 | 100 | |
|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| GRM15 | 0402 | 4 | X6S | | | | | | | |
| | | 2.5 | | X6S | | | | | | |
| GRM18 | 0603 | 50 | X6S | | | | | | | |
| | | 16 | | X6S | | | | | | |
| | | 10 | | X6S | | | | | | |
| | | 6.3 | | X6S | | | | | | |
| GRM21 | 0805 | 4 | | | X6S | | | | | |
| | | 50 | X6S | X6S | | | | | | |
| | | 25 | | | X6S | | | | | |
| | | 16 | | | X6S | X6S | | | | |
| | | 10 | | | X6S | | | | | |
| GRM31 | 1206 | 6.3 | | | | X6S | | | | |
| | | 4 | | | | X6S | X6S | | | |
| | | 35 | | | | X6S | | | | |
| | | 25 | | | | X6S | | | | |
| | | 16 | | | | | X6S | | | |
| GRM32 | 1210 | 10 | | | | | X6S | | | |
| | | 6.3 | | | | | | X6S | | |
| | | | | | | | | | X6S | X6T |
| | | | | | | | | | | X6S |

GRM series / Hi-Cap (1uF and over)

Chip size and Capacitance range

<X5R >

Mass Production Under Development

| Type | Size | WV | 1 | 2.2 | 4.7 | 10 | 22 | 47 | 100 |
|-------|------|-----|-----------------|-------------------|-------------------|-------------------|-----------------|-----------------|-----------------|
| GRM15 | 0402 | 10 | Mass Production | | | | | | |
| | | 6.3 | Mass Production | | | | | | |
| | | 4 | Mass Production | | | | | | |
| GRM18 | 0603 | 25 | Mass Production | | | | | | |
| | | 16 | Mass Production | | | | | | |
| | | 10 | Mass Production | | | | | | |
| | | 6.3 | Mass Production | | Mass Production | Mass Production | | | |
| GRM21 | 0805 | 4 | | | | | | | |
| | | 25 | | Mass Production | Mass Production | Under Development | | | |
| | | 16 | | Mass Production | Mass Production | Mass Production | | | |
| | | 10 | | Mass Production | Mass Production | Mass Production | | | |
| | | 6.3 | | Mass Production | Mass Production | Mass Production | Mass Production | | |
| GRM31 | 1206 | 4 | | | | | | | |
| | | 25 | | Under Development | Under Development | Under Development | | | |
| | | 16 | | Mass Production | Mass Production | Mass Production | Mass Production | | |
| | | 10 | | Mass Production | Mass Production | Mass Production | Mass Production | | |
| | | 6.3 | | Mass Production | Mass Production | Mass Production | Mass Production | Mass Production | Mass Production |
| GRM32 | 1210 | 35 | | | | Mass Production | | | |
| | | 25 | | | | Mass Production | | | |
| | | 16 | | | | Mass Production | Mass Production | | |
| | | 10 | | | | Mass Production | Mass Production | Mass Production | |
| | | 6.3 | | | | Mass Production | Mass Production | Mass Production | |

< Low profile series > GRM15 series: 0.33mm Max
 GRM18 series: 0.5mm Max
 GRM21 series: 0.70mm Max, 0.95mm Max
 GRM31 series: 0.95mm Max, 0.95mmMax

| Type | Size | Tmax (mm) | WV | 1 | 2.2 | 4.7 | 10 | 22 |
|-------|------|-----------|-----|-----|-----|-----|-----|-----|
| GRM15 | 0402 | 0.33 | 4 | X5R | | | | |
| GRM18 | 0603 | 0.5 | 16 | X5R | | | | |
| | | | 10 | X6S | | | | |
| | | | 6.3 | X6S | X5R | | | |
| | | | 4 | | | X5R | | |
| GRM21 | 0805 | 0.7 | 25 | X5R | | | | |
| | | | 16 | X5R | | X5R | | |
| | | | 10 | | X5R | | | |
| | | 0.95 | 25 | X7R | X5R | X5R | | |
| | | | 16 | | X5R | X5R | X6S | |
| | | | 10 | | | | X6S | X5R |
| GRM31 | 1206 | 0.7 | 6.3 | | | X6S | X5R | X5R |
| | | | 4 | | | X6S | X5R | X5R |
| | | | | | | X6S | | |
| | | 0.95 | 25 | | X5R | X5R | | |
| | | | 16 | | | | X5R | X5R |
| | | 10 | | | | X5R | | |

GRM series / Hi-Cap (1uF and over)

Murata P/N List <X7R (X7S, X7T, X7U)>

| Cap | Size | Chip T (mm) | TC | WV | Cap Tol | Murata Global P/N | Sample | M.P. |
|-----------|-----------|-------------|--------|--------------------|--------------------|------------------------|-----------------|-----------------|
| 1uF | 0603 | 0.8+/-0.1 | X7R | 25 | +/-10% | GRM188R71E105KA12D | Available | Mass Production |
| | | 0.8+/-0.1 | X7R | 16 | +/-10% | GRM188R71C105KA12D | Available | Mass Production |
| | | 0.8+/-0.1 | X7R | 10 | +/-10% | GRM188R71A105KA61D | Available | Mass Production |
| | | 0.8+/-0.1 | X7R | 6.3 | +/-10% | GRM188R70J105KA01D | Available | Mass Production |
| | 0805 | 1.25+/-0.15 | X7R | 50 | +/-10% | GRM21BR71H105KA12L | Available | Mass Production |
| | | 0.85+/-0.1 | X7R | 25 | +/-10% | GRM219R71E105KA88D | Available | Mass Production |
| | 1206 | 1.6+/-0.2 | X7R | 100 | +/-10% | GRM31CR72A105KA01L | Available | Mass Production |
| | | 1.15+/-0.1 | X7R | 50 | +/-10% | GRM31MR71H105KA88L | Available | Mass Production |
| 1210 | 1.6+/-0.2 | X7R | 100 | +/-10% | GRM32CR72A105KA35L | Available | Mass Production | |
| 2.2uF | 0603 | 0.8+/-0.1 | X7R | 10 | +/-10% | GRM188R71A225KE15D | Available | Mass Production |
| | | 0.8+/-0.1 | X7S | 6.3 | +/-10% | GRM188C70J225KE20D | Available | Mass Production |
| | 0805 | 1.25+/-0.15 | X7R | 25 | +/-10% | GRM21BR71E225KA73L | Available | Mass Production |
| | | 1.25+/-0.1 | X7R | 16 | +/-10% | GRM21BR71C225KA12L | Available | Mass Production |
| | | 1.25+/-0.1 | X7R | 10 | +/-10% | GRM21BR71A225KA01L | Available | Mass Production |
| | | 1.25+/-0.1 | X7R | 6.3 | +/-10% | GRM21BR70J225KA01L | Available | Mass Production |
| | 1206 | 1.6+/-0.3 | X7R | 100 | +/-10% | GRM31CR72A225K**** | 09Q2 | 09Q3 |
| | | 1.15+/-0.15 | X7R | 50 | +/-10% | GRM31CR71H225KA88L | Available | Mass Production |
| | | 1.15+/-0.15 | X7R | 25 | +/-10% | GRM31MR71E225KA93L | Available | Mass Production |
| | 1210 | 1.15+/-0.15 | X7R | 16 | +/-10% | GRM31MR71C225KA35L | Available | Mass Production |
| | | 2.5+/-0.2 | X7R | 100 | +/-10% | GRM32ER72A225KA35L | Available | Mass Production |
| | | 1.25+/-0.15 | X7R | 16 | +/-10% | GRM21BR71C475KA73L | Available | Mass Production |
| 4.7uF | 0805 | 1.25+/-0.15 | X7R | 10 | +/-10% | GRM21BR71A475KA73L | Available | Mass Production |
| | | 1.25+/-0.15 | X7R | 10 | +/-10% | GRM21BR71A475KA73L | Available | Mass Production |
| | 1206 | 1.6+/-0.2 | X7R | 50 | +/-10% | GRM31CR71H475KA12L | Available | Mass Production |
| | | 1.6+/-0.2 | X7R | 16 | +/-10% | GRM31CR71C475KA01L | Available | Mass Production |
| | 1210 | 2.5+/-0.2 | X7R | 50 | +/-10% | GRM32ER71H475KA88L | Available | Mass Production |
| | | 2.0+/-0.2 | X7R | 25 | +/-10% | GRM32DR71E475KA61L | Available | Mass Production |
| 1.8+/-0.2 | X7R | 16 | +/-10% | GRM32RR71C475KA01L | Available | Mass Production | | |
| 10uF | 0805 | 1.25+/-0.15 | X7R | 10 | +/-10% | GRM21BR71A106KE51L | Available | Mass Production |
| | | 1.25+/-0.15 | X7R | 6.3 | +/-10% | GRM21BR70J106KE76L | Available | Mass Production |
| | 1206 | 1.6+/-0.3 | X7S | 35 | +/-10% | GRM31CC7YA106K*** | 09Q2 | 09Q3 |
| | | 1.6+/-0.2 | X7R | 25 | +/-10% | GRM31CR71E106KA12L | Available | Mass Production |
| | | 1.6+/-0.2 | X7R | 16 | +/-10% | GRM31CR71C106KAC7L | Available | Mass Production |
| | | 1.6+/-0.2 | X7R | 10 | +/-10% | GRM31CR71A106KA01L | Available | Mass Production |
| | 1210 | 1.6+/-0.2 | X7R | 6.3 | +/-10% | GRM31CR70J106KA01L | Available | Mass Production |
| | | 2.5+/-0.2 | X7R | 35 | +/-10% | GRM32ER7YA106KA12L | Available | Mass Production |
| 2.0+/-0.2 | X7R | 16 | +/-10% | GRM32DR71C106KA01L | Available | Mass Production | | |
| 22uF | 1206 | 1.6+/-0.2 | X7R | 10 | +/-20%(+/-10%) | GRM31CR71A226M(K) E15L | Available | Mass Production |
| | | 1.6+/-0.2 | X7R | 6.3 | +/-20%(+/-10%) | GRM31CR70J226M(K) E19L | Available | Mass Production |
| | | 1.6+/-0.2 | X7S | 4 | +/-20%(+/-10%) | GRM31CC70G226M(K) E01L | Available | Mass Production |
| | 1210 | 2.5+/-0.2 | X7R | 25 | +/-20%(+/-10%) | GRM32ER71E226M(K) E15L | Available | Mass Production |
| | | 2.5+/-0.2 | X7R | 16 | +/-20%(+/-10%) | GRM32ER71C226M(K) E18L | Available | Mass Production |
| | | 2.5+/-0.2 | X7R | 10 | +/-20%(+/-10%) | GRM32ER71A226M(K) E20L | Available | Mass Production |
| 47uF | 1206 | 1.6+/-0.2 | X7U | 4 | +/-20% | GRM31CE70G476ME15L | Available | Mass Production |
| | | 2.5+/-0.2 | X7R | 10 | +/-20%(+/-10%) | GRM32ER71A476M(K) E15L | Available | Mass Production |
| | 1210 | 2.5+/-0.2 | X7R | 6.3 | +/-20%(+/-10%) | GRM32ER70J476M(K) E20L | Available | Mass Production |
| 100uF | 1210 | 2.5+/-0.2 | X7U | 4 | +/-20% | GRM32EE70G107ME19L | Available | Mass Production |

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- 3) This is muRata's development schedule, which may change due to progress of each development works.
- 4) Above individual specification code and packaging code were decided with muRata standard specification, and it may change due to the special requirement by customer's drawing.
- 5) Sample marked "-" in Sample column are built upon your request. Lead time will be around 4wks (might be extended depending on production schedule). Please contact Murata Sales or Product Engineer directly.

GRM series / Hi-Cap (1uF and over)

Murata P/N List <X6S (X6T)>

| Cap | Size | Chip T (mm) | TC | VV | Cap Tol | Murata Global P/N | Sample | M.P. | |
|-------------|------------|-------------|------------|--------|--------------------------|-------------------------|--------------------|-----------------|-----------------|
| 1uF | 0402 | 0.5+/-0.05 | X6S | 4 | +/-10% | GRM155C80G105KE19D | Available | Mass Production | |
| | 0603 | 0.8+/-0.1 | X6S | 50 | +/-10% | GRM188C81H105K**** | 09Q3 | 09Q4 | |
| | 0805 | 0.85+/-0.1 | X6S | 50 | +/-10% | GRM219C81H105K**** | 09Q3 | 09Q4 | |
| 2.2uF | 0402 | 0.5+/-0.05 | X6S | 2.5 | +/-20% | GRM155C80E225ME15D | Available | Mass Production | |
| | 0603 | 0.8+/-0.1 | X6S | 16 | +/-10% | GRM188C81C225K**** | 09Q2 | 09Q3 | |
| | 0603 | 0.8+/-0.1 | X6S | 10 | +/-10% | GRM188C81A225KE34D | Available | Mass Production | |
| 4.7uF | 0603 | 0.8+/-0.1 | X6S | 6.3 | +/-10% | GRM188C80J225KE19D | Available | Mass Production | |
| | 0805 | 0.8+/-0.1 | X6S | 4 | +/-10% | GRM188C80G475KE19D | Available | Mass Production | |
| | | 1.25+/-0.1 | X6S | 25 | +/-10% | GRM21BC81E475KA12L | Available | Mass Production | |
| | | 0.85+/-0.1 | X6S | 16 | +/-10% | GRM219C81C475K**** | 09Q2 | 09Q3 | |
| | 10uF | 0805 | 1.25+/-0.1 | X6S | 16 | +/-10% | GRM21BC81C475KA88L | Available | Mass Production |
| | | | 0.85+/-0.1 | X6S | 10 | +/-10% | GRM219C81A475KE34D | Available | Mass Production |
| 1.25+/-0.15 | | | X6S | 16 | +/-10% | GRM21BC81C106K**** | 09Q2 | 09Q3 | |
| 1206 | 1.25+/-0.1 | X6S | 6.3 | +/-10% | GRM21BC80J106KE19L | Available | Mass Production | | |
| | 0.85+/-0.1 | X6S | 4 | +/-10% | GRM219C80G106KE19D | Available | Mass Production | | |
| | 1.6+/-0.2 | X6S | 35 | +/-10% | GRM31CC8YA106K**** | 09Q2 | 09Q3 | | |
| 22uF | 1206 | 1.6+/-0.2 | X6S | 25 | +/-10% | GRM31CC81E106KE15L | Available | Mass Production | |
| | | 0.85+/-0.1 | X6S | 16 | +/-10% | GRM319C81C106K**** | 09Q2 | 09Q3 | |
| | | 1.25+/-0.15 | X6S | 4 | +/-20% | GRM21BC80G226ME39L | Available | Mass Production | |
| | 1210 | 1.6+/-0.2 | X6S | 16 | +/-10% | GRM31CC81C226M**** | 09Q2 | 09Q3 | |
| | | 1.6+/-0.2 | X6S | 10 | +/-20% +/-10% | GRM31CC81A226M (K) E19L | Available | Mass Production | |
| | | 1.6+/-0.2 | X6S | 6.3 | +/-20% +/-10% | GRM31CC80J226M (K) E19L | Available | Mass Production | |
| 47uF | 1210 | 1.6+/-0.2 | X6S | 4 | +/-20% | GRM31CC80G476ME19L | Available | Mass Production | |
| | | 2.5+/-0.2 | X6S | 10 | +/-20% +/-10% | GRM32EC81A476M (K) E19L | Available | Mass Production | |
| | | 2.5+/-0.2 | X6S | 6.3 | +/-20% +/-10% | GRM32EC80J476M (K) E64L | Available | Mass Production | |
| 100uF | 1206 | 1.6+/-0.3 | X6T | 4 | +/-20% | GRM31CD80G107ME39L | Available | Mass Production | |
| | 1210 | 2.5+/-0.2 | X6S | 6.3 | +/-20% | GRM32EC80J107ME20L | Available | Mass Production | |

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GRM series / Hi-Cap (1uF and over)

Murata P/N List <X5R>

| Cap | Size | Chip T (mm) | TC | WV | Cap Tol | Murata Global P/N | Sample | M.P. |
|------------|------------|-------------|-----|--------|--------------------|------------------------|-----------------|-----------------|
| 1uF | 0402 | 0.5+/-0.05 | X5R | 10 | +/-10% | GRM155R61A105KE15D | Available | Mass Production |
| | | 0.5+/-0.05 | X5R | 6.3 | +/-10% | GRM155R60J105KE19D | Available | Mass Production |
| | 0603 | 0.8+/-0.1 | X5R | 25 | +/-10% | GRM188R61E105KA12D | Available | Mass Production |
| | | 0.8+/-0.1 | X5R | 16 | +/-10% | GRM188R61C105KA93D | Available | Mass Production |
| | | 0.8+/-0.1 | X5R | 10 | +/-10% | GRM188R61A105KA61D | Available | Mass Production |
| 2.2uF | 0402 | 0.5+/-0.05 | X5R | 4 | +/-20% | GRM155R60G225ME15D | Available | Mass Production |
| | | 0.8+/-0.1 | X5R | 16 | +/-10% | GRM188R61C225KE15D | Available | Mass Production |
| | 0603 | 0.8+/-0.1 | X5R | 10 | +/-10% | GRM188R61A225KE34D | Available | Mass Production |
| | | 0.8+/-0.1 | X5R | 6.3 | +/-10% | GRM188R60J225KE19D | Available | Mass Production |
| | | 1.25+/-0.1 | X5R | 25 | +/-10% | GRM21BR61E225KA12L | Available | Mass Production |
| 1206 | 0.85+/-0.1 | X5R | 50 | +/-10% | GRM319R61H225K**** | 09Q2 | 09Q3 | |
| 4.7uF | 0603 | 0.8+/-0.1 | X5R | 6.3 | +/-10% | GRM188R60J475KE19D | Available | Mass Production |
| | | 0.85+/-0.1 | X5R | 25 | +/-10% | GRM219R61E475K**** | 09Q2 | 09Q3 |
| | 0805 | 1.25+/-0.1 | X5R | 25 | +/-10% | GRM21BR61E475KA12L | Available | Mass Production |
| | | 1.25+/-0.1 | X5R | 16 | +/-10% | GRM21BR61C475KA88L | Available | Mass Production |
| | | 1.25+/-0.15 | X5R | 10 | +/-10% | GRM21BR61A475KA73L | Available | Mass Production |
| | 1206 | 0.85+/-0.1 | X5R | 50 | +/-10% | GRM319R61H475K**** | 09Q3 | 09Q4 |
| 1.6+/-0.2 | | X5R | 25 | +/-10% | GRM31CR61E475KA88L | Available | Mass Production | |
| 10uF | 0603 | 0.8+/-0.1 | X5R | 6.3 | +/-20% | GRM188R60J106ME47D | Available | Mass Production |
| | | 0.8+/-0.1 | X5R | 4 | +/-20% | GRM188R60G106ME47D | Available | Mass Production |
| | 0805 | 1.25+/-0.15 | X5R | 25 | +/-10% | GRM21BR61E106K**** | Available | 09Q2 |
| | | 1.25+/-0.1 | X5R | 16 | +/-10% | GRM21BR61C106KE15L | Available | Mass Production |
| | | 0.85+/-0.1 | X5R | 10 | +/-10% | GRM219R61A106KE44D | Available | Mass Production |
| | | 1.25+/-0.1 | X5R | 10 | +/-10% | GRM21BR61A106KE19L | Available | Mass Production |
| | | 0.85+/-0.1 | X5R | 6.3 | +/-10% | GRM219R60J106KE19D | Available | Mass Production |
| | 1206 | 1.25+/-0.1 | X5R | 6.3 | +/-10% | GRM21BR60J106KE19L | Available | Mass Production |
| | | 1.6+/-0.2 | X5R | 50 | +/-10% | GRM31CR61H106K**** | 09Q3 | 09Q4 |
| | 1210 | 1.6+/-0.2 | X5R | 25 | +/-10% | GRM31CR61E106KA12L | Available | Mass Production |
| | | 1.6+/-0.2 | X5R | 16 | +/-10% | GRM31CR61C106KA88L | Available | Mass Production |
| 1.15+/-0.1 | | X5R | 10 | +/-10% | GRM31MR61A106KE19L | Available | Mass Production | |
| 2.0+/-0.2 | | X5R | 25 | +/-10% | GRM32DR61E106KA12L | Available | Mass Production | |
| 22uF | 0805 | 2.5+/-0.2 | X5R | 35 | +/-10% | GRM32ER61A106KA12L | Available | Mass Production |
| | | 1.25+/-0.15 | X5R | 6.3 | +/-20% | GRM21BR60J226ME39L | Available | Mass Production |
| | 1206 | 1.25+/-0.15 | X5R | 6.3 | +/-20% | GRM219R60J226M**** | 09Q3 | 09Q4 |
| | | 1.6+/-0.2 | X5R | 25 | +/-20%(+/-10%) | GRM31CR61E226M(K)**** | 09Q2 | 09Q3 |
| | | 1.6+/-0.2 | X5R | 16 | +/-20%(+/-10%) | GRM31CR61C226M(K) E15L | Available | Mass Production |
| | | 1.6+/-0.2 | X5R | 10 | +/-20%(+/-10%) | GRM31CR61A226M(K) E19L | Available | Mass Production |
| | | 1.6+/-0.2 | X5R | 6.3 | +/-20%(+/-10%) | GRM31CR60J226M(K) E19L | Available | Mass Production |
| | 1210 | 2.5+/-0.2 | X5R | 25 | +/-20%(+/-10%) | GRM32ER61E226M(K) E15L | Available | Mass Production |
| | | 2.5+/-0.2 | X5R | 16 | +/-20%(+/-10%) | GRM32ER61C226M(K) E20L | Available | Mass Production |
| | | 1.35+/-0.15 | X5R | 10 | +/-20%(+/-10%) | GRM32NR61A226M(K) E19L | Available | Mass Production |
| 47uF | 0805 | 2.5+/-0.2 | X5R | 10 | +/-20%(+/-10%) | GRM32ER61A226M(K) E20L | Available | Mass Production |
| | | 1.25+/-0.15 | X5R | 4 | +/-20% | GRM21BR60G476ME15L | Available | Mass Production |
| | 1206 | 1.6+/-0.2 | X5R | 6.3 | +/-20%(+/-10%) | GRM31CR60J476M(K) E19L | Available | Mass Production |
| | | 2.5+/-0.2 | X5R | 16 | +/-20%(+/-10%) | GRM32ER61C476M(K) E15L | Available | Mass Production |
| | | 2.5+/-0.2 | X5R | 10 | +/-20%(+/-10%) | GRM32ER61A476M(K) E20L | Available | Mass Production |
| 1210 | 2.5+/-0.2 | X5R | 6.3 | +/-20% | GRM32ER60J476ME20L | Available | Mass Production | |
| 100uF | 1206 | 1.6+/-0.2 | X5R | 6.3 | +/-20% | GRM31CR60J107ME39L | Available | Mass Production |
| | | 2.5+/-0.2 | X5R | 6.3 | +/-20% | GRM32ER60J107ME20L | Available | Mass Production |

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GRM series / Hi-Cap (1uF and over)

Murata P/N List <Low profile series>

GRM15 series: 0.33mm Max

GRM18 series: 0.5mm Max

GRM21 series: 0.70mm Max, 0.95mm Max

GRM31 series: 0.95mm Max, 0.95mmMax

| Cap | Size | TC | WV | Chip T(mm) | Murata Global P/N | Sample | Mass Production |
|-------|------|-----|-----------|--------------------|--------------------|-----------------|-----------------|
| 1uF | 0402 | X5R | 4 | 0.33mmMax | GRM153R60G105ME19D | Available | Mass Production |
| | 0603 | X5R | 16 | 0.5mmMax | GRM185R61C105KE44D | Available | Mass Production |
| | | X6S | 10 | 0.5mmMax | GRM185C81A105KE36D | Available | Mass Production |
| | 0805 | X6S | 6.3 | 0.5mmMax | GRM185C80J105KE26D | Available | Mass Production |
| | | X5R | 25 | 0.7mmMax | GRM216R61E105KA12D | Available | Mass Production |
| | | X5R | 16 | 0.7mmMax | GRM216R61C105KA88D | Available | Mass Production |
| | X7R | 25 | 0.95mmMax | GRM219R71E105KA88D | Available | Mass Production | |
| 2.2uF | 0603 | X5R | 6.3 | 0.5mmMax | GRM185R60J225KE26D | Available | Mass Production |
| | 0805 | X5R | 10 | 0.7mmMax | GRM216R61A225KE24D | Available | Mass Production |
| | | X5R | 25 | 0.95mmMax | GRM219R61E225KA12D | Available | Mass Production |
| | 1206 | X5R | 16 | 0.95mmMax | GRM219R61C225KA88D | Available | Mass Production |
| | | X5R | 50 | 0.95mmMax | GRM319R61H225K**** | 09Q2 | 09Q3 |
| | | X5R | 25 | 0.7mmMax | GRM316R61E225KA12D | Available | Mass Production |
| | X5R | 16 | 0.7mmMax | GRM316R61C225KA88D | Available | Mass Production | |
| 4.7uF | 0603 | X5R | 4 | 0.5mmMax | GRM185R60G475ME15D | Available | Mass Production |
| | 0805 | X5R | 16 | 0.7mmMax | GRM216R61C475K**** | 09Q2 | 09Q3 |
| | | X5R | 25 | 0.95mmMax | GRM219R61E475K**** | 09Q2 | 09Q3 |
| | | X6S | 16 | 0.95mmMax | GRM219C81C475K**** | 09Q2 | 09Q3 |
| | | X5R | 10 | 0.95mmMax | GRM219R61C475KE15D | Available | Mass Production |
| | 1206 | X6S | 10 | 0.95mmMax | GRM219C81A475KE34D | Available | Mass Production |
| | | X6S | 6.3 | 0.95mmMax | GRM219C80J475KE19D | Available | Mass Production |
| | | X5R | 10 | 0.7mmMax | GRM316R61A475KE19D | Available | Mass Production |
| | | X5R | 50 | 0.95mmMax | GRM319R61H475K**** | 09Q3 | 09Q4 |
| | | X5R | 25 | 0.95mmMax | GRM319R61E475KA12D | Available | Mass Production |
| X5R | | 16 | 0.95mmMax | GRM319R61C475KA88D | Available | Mass Production | |
| 10uF | 0805 | X5R | 10 | 0.95mmMax | GRM219R61A106KE44D | Available | Mass Production |
| | | X5R | 6.3 | 0.95mmMax | GRM219R60J106KE19D | Available | Mass Production |
| | 1206 | X5R | 25 | 0.95mmMax | GRM319R61E106K**** | 09Q2 | 09Q3 |
| | | X5R | 10 | 0.95mmMax | GRM319R61A106KE19D | Available | Mass Production |

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