

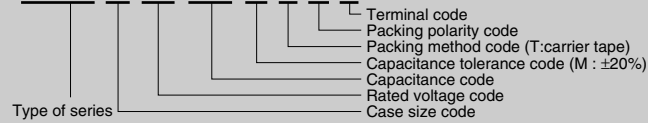
TMCH Series (High Reliability Tantalum Chip Capacitors)

Features

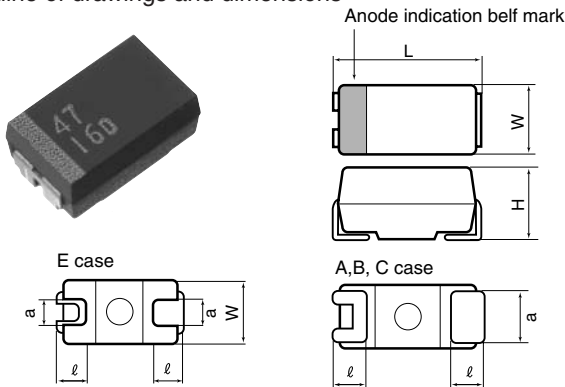
- A moulded type chip capacitor developed on the basis of TMC production technology especially for car electronics applications. Also usable for use in office automation and other computer-based equipment which is required to offer high reliability.
- High heat resistance and high reliability: Improved over the predecessor in high-temperature (125°C) reliability, moisture resistance, and temperature cycling test resistance.

Product symbol : (Example) TMCH Series A case 16V 1μF ±20%

TMCH A 1C 105 M T R F



Outline of drawings and dimensions



Dimensions

(Unit : mm)

| Case code | Case size | | | | |
|-----------|-------------------|---------------------|-------------------|-------------------|-------------------|
| | L ^{+0.2} | W ^{+0.2} | H ^{+0.2} | ℓ ^{+0.3} | a ^{+0.2} |
| P | 2.0 | 1.25 | 1.2 | 0.5 | 0.9 |
| A | 3.2 | 1.6 | 1.6 | 0.7 | 1.2 |
| B | 3.5 | 2.8 | 1.9 | 0.8 | 2.2 |
| C | 5.8 | 3.2 | 2.5 | 1.3 | 2.2 |
| E | 7.3 | 4.3 ^{+0.3} | 2.8 | 1.3 | 2.4 |

※Please see the page of TMCP Series, about details information of P case.

Standard value and case size

| Capacitance | Code | Rated voltage (V.DC) | | | | | | |
|-------------|------|----------------------|-------|-------|-----|-----|-----|-----|
| | | 4 | 7 | 10 | 16 | 20 | 25 | 35 |
| μF | | 0G | 0J | 1A | 1C | 1D | 1E | 1V |
| 0.10 | 104 | | | | | | | A |
| 0.15 | 154 | | | | | | | A |
| 0.22 | 224 | | | | | | | A |
| 0.33 | 334 | | | | | P | | A |
| 0.47 | 474 | | | | P | | A | A,B |
| 0.68 | 684 | | | | P | A | A | A,B |
| 1.0 | 105 | | | | P,A | A | | A,B |
| 1.5 | 155 | | | P,A | A | A | B | B,C |
| 2.2 | 225 | | A | P,A | A | A,B | B | B,C |
| 3.3 | 335 | A | A | P,A | A,B | B | B | B,C |
| 4.7 | 475 | A | A | P,A,B | A,B | B | B,C | C,E |
| 6.8 | 685 | | P,A,B | B | B | B,C | C | C,E |
| 10 | 106 | B | P,B | A,B | B,C | C | C,E | E |
| 15 | 156 | B | B | B,C | C | C,E | E | E |
| 22 | 226 | | B,C | C | C,E | E | E | |
| 33 | 336 | C | C | C,E | C,E | E | | |
| 47 | 476 | C | C,E | C,E | C,E | | | |
| 68 | 686 | E | E | C,E | | | | |
| 100 | 107 | E | E | | | | | |

() brackets ; in development.

| Product specifications | TMCH | P case and the other (Bold - type indication) | Test conditions JIS C5101-1:1998 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|--|--|--|--------------------------|--------------------------|---------------------------|--|--|-----|----|-----|-----|----|-----|------|---------|------|------|---------|------|------|-------|------|------|------|------|------|------|----|------|------|------|------|------|------|--|---------------------------|---------------|--|--|---------------|--|--|-----|----|-----|-----|----|-----|------|---------|------|------|---------|------|------|-------|------|------|------|------|------|------|----|---------------------------|-------------------------|---------------------------|--------------------------|--------------------------|---------------------------|----------------|
| | Operating temperature range | -55°C ~ +125°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rated voltage | DC4 ~ 35V | | 85°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Surge voltage | DC5 ~ 45V | | 85°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Derated voltage | DC2.5 ~ 22V | | 125°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance | 0.1 ~ 100μF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance tolerance | ±10% or 20% | | Paragraph 4.7, 120 Hz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage current | Refer to Standard product table | | Paragraph 4.9, in 5 minutes after the rated voltage is applied. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| tanδ | Refer to Standard product table | | Paragraph 4.8, 120Hz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Surge withstanding voltage | ΔC/C ±5% or less tan δ Specified initial value or less LC Specified initial value or less | ΔC/C ±10% or less tan δ Specified initial value or less LC Specified initial value or less | Paragraph 4.26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Temperature characteristics | <table border="1"> <thead> <tr> <th rowspan="2">Value shown table or less</th> <th colspan="3">Initial value</th> <th colspan="3">Initial value</th> </tr> <tr> <th>-55</th> <th>85</th> <th>125</th> <th>-55</th> <th>85</th> <th>125</th> </tr> </thead> <tbody> <tr> <td>ΔC/C</td> <td>-10~10%</td> <td>±10%</td> <td>±10%</td> <td>-10~10%</td> <td>±10%</td> <td>±10%</td> </tr> <tr> <td>tan δ</td> <td>0.04</td> <td>0.04</td> <td>0.05</td> <td>0.06</td> <td>0.10</td> <td>0.10</td> </tr> <tr> <td>LC</td> <td>0.06</td> <td>0.06</td> <td>0.07</td> <td>0.08</td> <td>0.10</td> <td>0.12</td> </tr> </tbody> </table> | Value shown table or less | Initial value | | | Initial value | | | -55 | 85 | 125 | -55 | 85 | 125 | ΔC/C | -10~10% | ±10% | ±10% | -10~10% | ±10% | ±10% | tan δ | 0.04 | 0.04 | 0.05 | 0.06 | 0.10 | 0.10 | LC | 0.06 | 0.06 | 0.07 | 0.08 | 0.10 | 0.12 | <table border="1"> <thead> <tr> <th rowspan="2">Value shown table or less</th> <th colspan="3">Initial value</th> <th colspan="3">Initial value</th> </tr> <tr> <th>-55</th> <th>85</th> <th>125</th> <th>-55</th> <th>85</th> <th>125</th> </tr> </thead> <tbody> <tr> <td>ΔC/C</td> <td>-20~20%</td> <td>±10%</td> <td>±10%</td> <td>-20~20%</td> <td>±10%</td> <td>±10%</td> </tr> <tr> <td>tan δ</td> <td>0.08</td> <td>0.10</td> <td>0.10</td> <td>0.10</td> <td>0.10</td> <td>0.12</td> </tr> <tr> <td>LC</td> <td>0.065CV or 0.25μA or less</td> <td>0.05CV or 2.5μA or less</td> <td>0.125CV or 5.12μA or less</td> <td>0.05CV or 0.25μA or less</td> <td>0.125CV or 2.5μA or less</td> <td>0.125CV or 3.12μA or less</td> </tr> </tbody> </table> | Value shown table or less | Initial value | | | Initial value | | | -55 | 85 | 125 | -55 | 85 | 125 | ΔC/C | -20~20% | ±10% | ±10% | -20~20% | ±10% | ±10% | tan δ | 0.08 | 0.10 | 0.10 | 0.10 | 0.10 | 0.12 | LC | 0.065CV or 0.25μA or less | 0.05CV or 2.5μA or less | 0.125CV or 5.12μA or less | 0.05CV or 0.25μA or less | 0.125CV or 2.5μA or less | 0.125CV or 3.12μA or less | Paragraph 4.24 |
| Value shown table or less | Initial value | | | Initial value | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | -55 | 85 | 125 | -55 | 85 | 125 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ΔC/C | -10~10% | ±10% | ±10% | -10~10% | ±10% | ±10% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| tan δ | 0.04 | 0.04 | 0.05 | 0.06 | 0.10 | 0.10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LC | 0.06 | 0.06 | 0.07 | 0.08 | 0.10 | 0.12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Value shown table or less | Initial value | | | Initial value | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | -55 | 85 | 125 | -55 | 85 | 125 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ΔC/C | -20~20% | ±10% | ±10% | -20~20% | ±10% | ±10% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| tan δ | 0.08 | 0.10 | 0.10 | 0.10 | 0.10 | 0.12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LC | 0.065CV or 0.25μA or less | 0.05CV or 2.5μA or less | 0.125CV or 5.12μA or less | 0.05CV or 0.25μA or less | 0.125CV or 2.5μA or less | 0.125CV or 3.12μA or less | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Solder heat resistance | ΔC/C ±5% or less tan δ Specified initial value or less LC Specified initial value or less | ΔC/C ±5% or less tan δ Specified initial value or less LC Specified initial value or less | Solder Dip 260±5°C A, B case C, E case 10±1 sec. 5±0.5 sec. Reflow-260°C 10±1 sec. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Moisture resistance no load | ΔC/C ±5% or less tan δ 150% Specified initial value or less LC 200% Specified initial value or less | ΔC/C ±10% or less tan δ 200% Specified initial value or less LC 500% Specified initial value or less | Paragraph 4.22, 85°C 85%RH, 1000hrs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| High-temperature load | ΔC/C ±10% or less tan δ Specified initial value or less LC 125% Specified initial value or less | ΔC/C ±20% or less tan δ Specified initial value or less LC 125% Specified initial value or less | Paragraph 4.23, 85°C The rated voltage is applied for 2000 hours. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thermal shock | ΔC/C ±5% or less tan δ Specified initial value or less LC 200% Specified initial value or less | ΔC/C ±20% or less tan δ 200% Specified initial value or less LC 200% Specified initial value or less | Leave at -55°C, normal temperature, 125°C, and normal temperature for 30 min., 3 min., 30 min., and 3 min. Repeat this operation 1000 times running. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Moisture resistance load | ΔC/C ±5% or less tan δ 150% Specified initial value or less LC 200% Specified initial value or less | ΔC/C ±12% or less tan δ 200% Specified initial value or less LC 500% Specified initial value or less | 65°C, humidity 90 to 95%RH The rated voltage is applied for 500 hrs. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| High temperature load | ΔC/C ±10% or less tan δ 150% Specified initial value or less LC 200% Specified initial value or less | ΔC/C ±10% or less tan δ 200% Specified initial value or less LC 500% Specified initial value or less | (At 150°C with no load) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Failure rate | 0.5% / 1000hrs | 0.5% / 1000hrs | 85°C. The rated voltage is applied (through a protective resistor of 1 Ω/V). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

※This catalog is designed for providing general information. Please inquire of our Sales Department to confirm specifications prior to use.

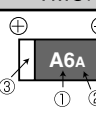
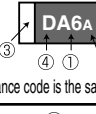
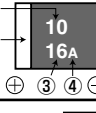
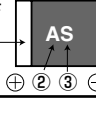
Standard product tables - TMCH series

Standard product table - TMCH series

| Rated voltage V. DC | Capacitance μF | tanδ | Leakage current μA | Case code | Product name | |
|------------------------|-------------------|------|-----------------------|--------------|--------------|------------|
| 4 | 3.3 | 0.06 | 0.25 | A | TMCHA0G335 | |
| | 4.7 | 0.06 | 0.25 | A | TMCHA0G475 | |
| | 10 | 0.06 | 0.25 | B | TMCHB0G106 | |
| | 15 | 0.06 | 0.30 | B | TMCHB0G156 | |
| | 33 | 0.06 | 0.66 | C | TMCHC0G336 | |
| | 47 | 0.06 | 0.94 | C | TMCHC0G476 | |
| | 68 | 0.06 | 1.36 | E | TMCHE0G686 | |
| | 100 | 0.06 | 2.00 | E | TMCHE0G107 | |
| 7 (6.3) | 2.2 | 0.06 | 0.25 | A | TMCHA0J225 | |
| | 3.3 | 0.06 | 0.25 | A | TMCHA0J335 | |
| | 4.7 | 0.06 | 0.25 | A | TMCHA0J475 | |
| | | 0.06 | 0.25 | P | TMCHP0J685 | |
| | 6.8 | 0.06 | 0.25 | A | TMCHA0J685 | |
| | | 0.06 | 0.25 | B | TMCHB0J685 | |
| | 10 | 0.08 | 0.31 | P | TMCHP0J106 | |
| | | 0.06 | 0.35 | B | TMCHB0J106 | |
| | 15 | 0.06 | 0.52 | B | TMCHB0J156 | |
| | 22 | 0.06 | 0.77 | B | TMCHB0J226 | |
| | 33 | 0.06 | 0.77 | C | TMCHC0J226 | |
| | | 0.06 | 1.15 | C | TMCHC0J336 | |
| | 47 | 0.06 | 1.64 | C | TMCHC0J476 | |
| | | 0.06 | 1.64 | E | TMCHE0J476 | |
| 68 | 0.04 | 2.38 | E | TMCHE0J686 | | |
| 100 | 0.06 | 3.50 | E | TMCHE0J107 | | |
| 10 | 1.5 | 0.08 | 0.25 | P | TMCHP1A155 | |
| | | 0.06 | 0.25 | A | TMCHA1A155 | |
| | 2.2 | 0.08 | 0.25 | P | TMCHP1A225 | |
| | | 0.06 | 0.25 | A | TMCHA1A225 | |
| | 3.3 | 0.08 | 0.25 | P | TMCHP1A335 | |
| | | 0.06 | 0.25 | A | TMCHA1A335 | |
| | 4.7 | 0.08 | 0.25 | P | TMCHP1A475 | |
| | | 0.06 | 0.25 | A | TMCHA1A475 | |
| | 6.8 | 0.06 | 0.25 | B | TMCHB1A475 | |
| | | 0.06 | 0.34 | B | TMCHB1A685 | |
| | 10 | 0.08 | 0.50 | A | TMCHA1A106 | |
| | | 0.06 | 0.50 | B | TMCHB1A106 | |
| | 15 | 0.06 | 0.75 | B | TMCHB1A156 | |
| | | 0.06 | 0.75 | C | TMCHC1A156 | |
| | 22 | 0.06 | 1.10 | C | TMCHC1A226 | |
| | 33 | 0.06 | 1.65 | C | TMCHC1A336 | |
| | | 0.06 | 1.65 | E | TMCHE1A336 | |
| | 47 | 0.08 | 2.35 | C | TMCHC1A476 | |
| | | 0.06 | 2.35 | E | TMCHE1A476 | |
| | 68 | 0.08 | 3.40 | C | TMCHC1A686 | |
| | | 0.08 | 3.40 | E | TMCHE1A686 | |
| | 16 | 0.47 | 0.06 | 0.25 | P | TMCHP1C474 |
| | | 0.68 | 0.06 | 0.25 | P | TMCHP1C684 |
| | | | 0.06 | 0.25 | P | TMCHP1C105 |
| 1.0 | | 0.04 | 0.25 | A | TMCHA1C105 | |
| 1.5 | | 0.06 | 0.25 | A | TMCHA1C155 | |
| 2.2 | | 0.06 | 0.25 | A | TMCHA1C225 | |
| 3.3 | | 0.08 | 0.26 | P | TMCHP1C335 | |
| | | 0.06 | 0.26 | A | TMCHA1C335 | |
| 4.7 | | 0.06 | 0.26 | B | TMCHB1C335 | |
| | | 0.06 | 0.37 | A | TMCHA1C475 | |
| 6.8 | | 0.06 | 0.37 | B | TMCHB1C475 | |
| | | 0.06 | 0.54 | B | TMCHB1C685 | |
| 10 | | 0.06 | 0.80 | B | TMCHB1C106 | |
| | | 0.06 | 0.80 | C | TMCHC1C106 | |
| 15 | | 0.06 | 1.20 | C | TMCHC1C156 | |
| 22 | | 0.06 | 1.76 | C | TMCHC1C226 | |
| | 0.06 | 1.76 | E | TMCHE1C226 | | |
| 33 | 0.08 | 2.64 | C | TMCHC1C336 | | |
| | 0.06 | 2.64 | E | TMCHE1C336 | | |
| 47 | 0.08 | 3.76 | C | TMCHC1C476 | | |
| | 0.08 | 3.76 | E | TMCHE1C476 | | |
| 20 | 0.33 | 0.06 | 0.25 | P | TMCHP1D334 | |
| | 0.68 | 0.04 | 0.25 | A | TMCHA1D684 | |
| | 1.0 | 0.04 | 0.25 | A | TMCHA1D105 | |
| | 1.5 | 0.06 | 0.25 | A | TMCHA1D155 | |
| | 2.2 | 0.06 | 0.25 | A | TMCHA1D225 | |
| | | 0.06 | 0.25 | B | TMCHB1D225 | |
| 3.3 | 0.06 | 0.33 | B | TMCHB1D335 | | |
| 4.7 | 0.06 | 0.47 | B | TMCHB1D475 | | |

| Rated voltage V. DC | Capacitance μF | tanδ | Leakage current μA | Case code | Product name |
|------------------------|-------------------|------|-----------------------|--------------|--------------|
| 20 | 6.8 | 0.06 | 0.68 | B | TMCHB1D685 |
| | | 0.06 | 0.68 | C | TMCHC1D685 |
| | 10 | 0.06 | 1.00 | C | TMCHC1D106 |
| | 15 | 0.06 | 1.50 | C | TMCHC1D156 |
| | | 0.06 | 1.50 | E | TMCHE1D156 |
| | 22 | 0.06 | 2.20 | E | TMCHE1D226 |
| 33 | 0.06 | 3.30 | E | TMCHE1D336 | |
| 25 | 0.47 | 0.04 | 0.25 | A | TMCHA1E474 |
| | 0.68 | 0.04 | 0.25 | A | TMCHA1E684 |
| | 1.5 | 0.06 | 0.25 | B | TMCHB1E155 |
| | 2.2 | 0.06 | 0.27 | B | TMCHB1E225 |
| | 3.3 | 0.06 | 0.41 | B | TMCHB1E335 |
| | | 0.06 | 0.58 | B | TMCHB1E475 |
| | 4.7 | 0.06 | 0.58 | C | TMCHC1E475 |
| | | 0.06 | 0.85 | C | TMCHC1E685 |
| | 10 | 0.06 | 1.25 | C | TMCHC1E106 |
| | | 0.06 | 1.25 | E | TMCHE1E106 |
| | 15 | 0.06 | 1.87 | E | TMCHE1E156 |
| | 22 | 0.06 | 2.75 | E | TMCHE1E226 |
| 35 | 0.1 | 0.04 | 0.25 | A | TMCHA1V104 |
| | 0.15 | 0.04 | 0.25 | A | TMCHA1V154 |
| | 0.22 | 0.04 | 0.25 | A | TMCHA1V224 |
| | 0.33 | 0.04 | 0.25 | A | TMCHA1V334 |
| | | 0.04 | 0.25 | A | TMCHA1V474 |
| | 0.47 | 0.04 | 0.25 | B | TMCHB1V474 |
| | | 0.04 | 0.25 | A | TMCHA1V684 |
| | 0.68 | 0.04 | 0.25 | B | TMCHB1V684 |
| | | 0.04 | 0.25 | A | TMCHA1V105 |
| | 1.0 | 0.04 | 0.25 | B | TMCHB1V105 |
| | | 0.06 | 0.26 | B | TMCHB1V155 |
| | 1.5 | 0.06 | 0.26 | C | TMCHC1V155 |
| | | 0.06 | 0.38 | B | TMCHB1V225 |
| | 2.2 | 0.06 | 0.38 | C | TMCHC1V225 |
| | | 0.06 | 0.57 | B | TMCHB1V335 |
| | 3.3 | 0.06 | 0.57 | C | TMCHC1V335 |
| | | 0.06 | 0.82 | C | TMCHC1V475 |
| | 4.7 | 0.06 | 0.82 | E | TMCHE1V475 |
| 0.06 | | 1.19 | C | TMCHC1V685 | |
| 6.8 | 0.06 | 1.19 | E | TMCHE1V685 | |
| | 0.06 | 1.75 | E | TMCHE1V106 | |
| 15 | 0.06 | 2.62 | E | TMCHE1V156 | |

Marking indication

| TMCH * △△□□□○○○F | |
|---|---|
| A, B case |  <p>16V1μF A case</p> <p>① Simplified code of nominal capacitance (A6 : 1μF)</p> <p>② Lot indication (A: for manufacturing in January, 2009)</p> |
| |  <p>20V1μF A case</p> <p>③ Anode indication belt mark</p> <p>④ Simplified code of rated voltage (D : 20V)</p> |
| *When the capacitance code is the same in the same case, use the voltage code for the higher rated voltage. | |
| C, E case |  <p>① Anode indication belt mark</p> <p>② Nominal capacitance Value (10μF)</p> <p>③ Rated voltage (16V)</p> <p>④ Lot indication (A: for manufacturing in January, 2009)</p> |
| P case |  <p>10V4.7μF</p> <p>① Anode indication belt mark</p> <p>② Simplified code of rated voltage (A: 10V)</p> <p>③ Simplified code of nominal capacitance (S: 4.7μ)</p> |

Lot indication

| Year | Month | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|------|-------|---|---|---|---|---|---|---|---|---|----|----|----|
| 2009 | | A | B | C | D | E | F | G | H | J | K | L | M |
| 2010 | | N | P | Q | R | S | T | U | V | W | X | Y | Z |
| 2011 | | a | b | c | d | e | f | g | h | j | k | l | m |
| 2012 | | n | p | q | r | s | t | u | v | w | x | y | z |