

**Military radio frequency microwave single-layer chip capacitor****Product introduction**

General specification:

GJB 2442-95 "General Specification for Single-layer Chip Ceramic Capacitors with Reliability Indicators"

Implement detailed corporate specifications:

Q/CT 12-2013 "Detailed Specification of J series Ordinary Military Single-layer Chip Capacitors" Screening process:

High temperature storage: 100% inspection at 125°C, keep for 48h

Temperature shock: 100% inspection (at -55°C~+125°C, 5 cycles)

Visual inspection: batch by batch inspection

Bonding strength: batch by batch inspection

Eligibility criteria: The rejection rate is  $\leq 8\%$ , which is used as the criterion for the approval of the batch

Provide reports: "Screening Report", "Shipment Inspection Report", "Certificate of Conformity"

Quality data: keep for 10 years

**Table of case types**

| Structure diagram                                                                   | Farohm case type | Dalicap Analog series |
|-------------------------------------------------------------------------------------|------------------|-----------------------|
|  | A                | SG Series             |
|  | B                | SM Series             |
|  | C                |                       |
|  | D                | SS Series             |
|  | E                | SA Series             |
|  | F                | SP Series             |

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Temperature shock: 100% inspection (at -55°C~+125°C, 5 cycles)

Visual inspection: batch by batch inspection

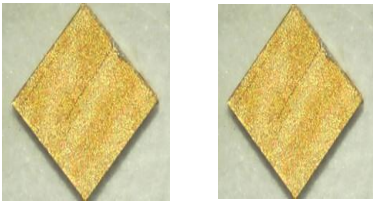
Bonding strength: batch by batch inspection

Eligibility criteria: The rejection rate is ≤8%, which is used as the criterion for the approval of the batch

Provide reports: "Screening Report", "Shipment Inspection Report", "Certificate of Conformity"

Quality data: keep for 10 years

General military (General Army) radio frequency microwave single-layer chip capacitor

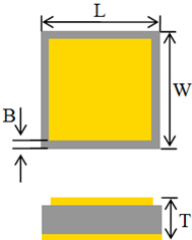
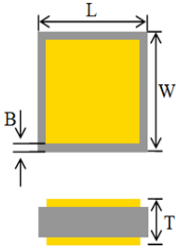


1.Features:

- Maximum usage frequency: 100GHz
- Minimum size: 0.200mm×0.200mm
- Capacity range: 0.02pF~10000pF
- Working temperature range: -55°C~+125°C

2. Shape structure:

Table 1 Shape code

| Code              | A                                                                                   | B                                                                                    | C                                                                                     |
|-------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Structure diagram |  |  |  |

### 3. Product model specifications. General purpose single layer capacitor

| <u>J</u>       | <u>FHC</u>          | <u>1</u>                                        | <u>A</u>    | 101                                                                                           | <u>W</u>                                                                                                                                           | 15        | <u>J</u>                                                                                                                                                                                                             |
|----------------|---------------------|-------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                |                     |                                                 |             |                                                                                               |                                                                                                                                                    |           |                                                                                                                                                                                                                      |
| Grade          | Series              | Voltage Rate                                    | Case code   | Nominal capacity                                                                              | TCC                                                                                                                                                | Size code | Tolerance code                                                                                                                                                                                                       |
| Military grade | FHC: Chip capacitor | 1: 100V<br>3: 63V<br>5: 50V<br>2: 25V<br>6: 16V | A<br>B<br>C | The first two digits are significant digits, and the last digit is a power of 10.<br>Unit: pF | F: $0\pm 30\text{ppm}/^{\circ}\text{C}$<br>G: $-3300\pm 500\text{ppm}/^{\circ}\text{C}$<br>P: $+22\%, -33\%$<br>X: $+22\%, -82\%$<br>W: $\pm 15\%$ | 10~90     | A: $\pm 0.05\text{pF}$<br>B: $\pm 0.10\text{pF}$<br>C: $\pm 0.25\text{pF}$<br>D: $\pm 0.50\text{pF}$<br>F: $\pm 1.0\%$<br>J: $\pm 5.0\%$<br>K: $\pm 10.0\%$<br>L: $\pm 15.0\%$<br>M: $\pm 20.0\%$<br>O: $\pm 40.0\%$ |

### 4. Dimensions

Unit: mm/(inch)

| Size Code | L (Long)           | W (Wide)           | T (Thick)            |
|-----------|--------------------|--------------------|----------------------|
| 10        | $0.254\pm 0.076$   | $0.254\pm 0.076$   | $0.20\pm 0.06$       |
|           | $(0.010\pm 0.003)$ | $(0.010\pm 0.003)$ | $(0.0078\pm 0.0024)$ |
| 15        | $0.381\pm 0.127$   | $0.381\pm 0.127$   | $0.20\pm 0.06$       |
|           | $(0.015\pm 0.005)$ | $(0.015\pm 0.005)$ | $(0.0078\pm 0.0024)$ |
| 20        | $0.508\pm 0.127$   | $0.508\pm 0.127$   | $0.20\pm 0.06$       |
|           | $(0.020\pm 0.005)$ | $(0.020\pm 0.005)$ | $(0.0087\pm 0.0024)$ |
| 25        | $0.635\pm 0.127$   | $0.635\pm 0.127$   | $0.20\pm 0.06$       |
|           | $(0.025\pm 0.005)$ | $(0.025\pm 0.005)$ | $(0.0078\pm 0.0024)$ |
| 30        | $0.762\pm 0.127$   | $0.762\pm 0.127$   | $0.20\pm 0.06$       |
|           | $(0.030\pm 0.005)$ | $(0.030\pm 0.005)$ | $(0.0078\pm 0.0024)$ |
| 35        | $0.889\pm 0.127$   | $0.889\pm 0.127$   | $0.20\pm 0.06$       |
|           | $(0.035\pm 0.005)$ | $(0.035\pm 0.005)$ | $(0.0078\pm 0.0024)$ |
| 40        | $1.016\pm 0.127$   | $1.016\pm 0.127$   | $0.20\pm 0.06$       |
|           | $(0.040\pm 0.005)$ | $(0.040\pm 0.005)$ | $(0.0078\pm 0.0024)$ |
| 50        | $1.270\pm 0.127$   | $1.270\pm 0.127$   | $0.20\pm 0.06$       |
|           | $(0.050\pm 0.005)$ | $(0.050\pm 0.005)$ | $(0.0078\pm 0.0024)$ |
| 70        | $1.780\pm 0.254$   | $1.780\pm 0.254$   | $0.20\pm 0.06$       |
|           | $(0.070\pm 0.010)$ | $(0.070\pm 0.010)$ | $(0.0078\pm 0.0024)$ |
| 90        | $2.290\pm 0.254$   | $2.290\pm 0.254$   | $0.20\pm 0.06$       |
|           | $(0.090\pm 0.010)$ | $(0.090\pm 0.010)$ | $(0.0078\pm 0.0024)$ |

Remarks: 1) B (margin retention):  $0.010\text{mm}\sim 0.100\text{mm}$  ( $0.0004''\sim 0.004''$ )

2) Product size can be customized according to customer requirements.

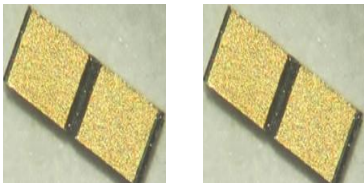
### 5. Main electrical performance parameters

| Media code | Dielectric constant | TCC | Maximum loss | Minimum insulation resistance | Dielectric withstand voltage |
|------------|---------------------|-----|--------------|-------------------------------|------------------------------|
| M200       | 20@1MHz             | F   | 0.15%@1MHz   | 1000GΩ                        | 2.5U <sub>R</sub>            |
| M400       | 40@1MHz             | F   | 0.15%@1MHz   | 1000GΩ                        | 2.5U <sub>R</sub>            |
| M600       | 60@1MHz             | F   | 0.15%@1MHz   | 1000GΩ                        | 2.5U <sub>R</sub>            |
| M101       | 100@1MHz            | F   | 0.15%@1MHz   | 1000GΩ                        | 2.5U <sub>R</sub>            |
| M141       | 140@1MHz            | G   | 0.30%@1MHz   | 1000GΩ                        | 2.5U <sub>R</sub>            |
| M221       | 220@1MHz            | G   | 0.30%@1MHz   | 1000GΩ                        | 2.5U <sub>R</sub>            |
| M301       | 300@1MHz            | G   | 0.30%@1MHz   | 1000GΩ                        | 2.5U <sub>R</sub>            |
| M601       | 600@1MHz            | G   | 0.30%@1MHz   | 100GΩ                         | 2.5U <sub>R</sub>            |
| M901       | 900@1KHz            | P   | 0.50%@1KHz   | 100GΩ                         | 2.5U <sub>R</sub>            |
| M252       | 2500@1KHz           | W   | 4.0%@1KHz    | 100GΩ                         | 2.5U <sub>R</sub>            |
| M402       | 4000@1KHz           | W   | 4.0%@1KHz    | 100GΩ                         | 2.5U <sub>R</sub>            |
| M902       | 9000@1KHz           | X   | 4.0%@1KHz    | 100GΩ                         | 2.5U <sub>R</sub>            |
| M153       | 15000@1MHz          | W   | 2.5%@1MHz    | 10GΩ                          | 2.5U <sub>R</sub>            |
| M253       | 25000@1MHz          | W   | 2.5%@1MHz    | 10GΩ                          | 2.5U <sub>R</sub>            |
| M353       | 35000@1MHz          | W   | 2.5%@1MHz    | 10GΩ                          | 2.5U <sub>R</sub>            |

### 6. Capacity range and recommended capacity value

| Size code | Tolerance range (pF) | Recommended chip capacitance value (pF)                                |
|-----------|----------------------|------------------------------------------------------------------------|
| 10        | 0.02~100             | 0.1、1.0、1.2、3.6、8.2、10、56、68;                                          |
| 15        | 0.05~300             | 0.8、3.0、3.3、3.6、3.9、4.3、4.7、5.1、10、22、27、33、39、50、100、150、180、200、300; |
| 20        | 0.10~500             | 1.0、1.2、2.0、10、14、27、50、68、100、220、240、330;                            |
| 25        | 0.15~700             | 1.0、2.0、10、15、20、33、47、50、100、470;                                     |
| 30        | 0.25~1000            | 22、30、100、120、910、1000;                                                |
| 35        | 0.35~1500            | 1.0、10、15、18、100、1000;                                                 |
| 40        | 0.50~2000            | 20、47、50、68、1000、1500;                                                 |
| 50        | 0.60~3000            | 33、42、1500;                                                            |
| 70        | 1.20~6000            | 1000、3000;                                                             |
| 90        | 2.00~10000           | 10000;                                                                 |

General military (General Army) radio  
frequency microwave single-layer  
chip capacitor series



1. Features:
- Maximum usage frequency: 40GHz
  - Surface mount type, eliminating gold wire bonding
  - Capacity range: 0.01pF~2000pF
  - Working temperature range: -55℃~+125℃
2. Product model specifications

| J-       | FHC                       | 1                                               | 101                                                                                                       | 0402      | W                                                                         | D         | J                                                                                                                   |
|----------|---------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------------|
|          |                           |                                                 |                                                                                                           |           |                                                                           |           |                                                                                                                     |
| Grade    | Series                    | Voltage<br>rate code                            | Nominal<br>capacity                                                                                       | Size code | TCC                                                                       | Case code | Tolerance<br>code                                                                                                   |
| Military | FHC:<br>Chip<br>capacitor | 1: 100V<br>3: 63V<br>5: 50V<br>2: 25V<br>6: 16V | The first two<br>digits are<br>significant digits,<br>and the last digit<br>is a power of 10.<br>Unit: pF | 0201~1206 | F: 0±30ppm/℃<br>G: -3300±500ppm/℃<br>P: +22%,-33% X:<br>+22%,-82% W: ±15% | D         | A:±0.05pF<br>B:±0.10pF<br>C:±0.25pF<br>D:±0.50pF<br>F:±1.0% J:±5.0%<br>K:±10.0%<br>L:±15.0%<br>M:±20.0%<br>O:±40.0% |

Outline structure, equivalent circuit diagram, installation diagram:

Table 1 External structure and equivalent circuit diagram

| Case code | Shape structure | Equivalent circuit diagram | Installation diagram |
|-----------|-----------------|----------------------------|----------------------|
| D         |                 |                            |                      |

**Dimensions**

Unit: mm/(inch)

| Size code | L (Long)      | W (Wide)      | H (Thick)       | G (gap)       |
|-----------|---------------|---------------|-----------------|---------------|
| 0201      | 0.508±0.127   | 0.254±0.051   | 0.20±0.06       | 0.102±0.051   |
|           | (0.020±0.005) | (0.010±0.002) | (0.0078±0.0024) | (0.004±0.002) |
| 0402      | 1.016±0.127   | 0.508±0.127   | 0.20±0.06       | 0.102±0.051   |
|           | (0.040±0.005) | (0.020±0.005) | (0.0078±0.0024) | (0.004±0.002) |
| 0603      | 1.524±0.127   | 0.762±0.127   | 0.20±0.06       | 0.102±0.051   |
|           | (0.060±0.005) | (0.030±0.005) | (0.0078±0.0024) | (0.004±0.002) |
| 0805      | 2.032±0.254   | 1.270±0.127   | 0.20±0.06       | 0.102±0.051   |
|           | (0.080±0.010) | (0.050±0.005) | (0.0078±0.0024) | (0.004±0.002) |
| 1206      | 3.048±0.254   | 1.524±0.127   | 0.20±0.06       | 0.102±0.051   |
|           | (0.120±0.010) | (0.060±0.005) | (0.0078±0.0024) | (0.004±0.002) |

Remarks: 1) Product size can be customized according to customer requirements;  
 2) Series chip capacitors can also be used in accordance with E-type products.

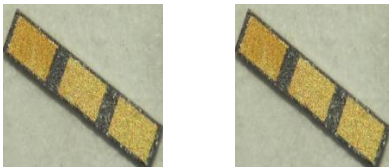
**Main electrical performance parameters**

| Code | Dielectric constant | TCC | Max loss   | Min insulation resistance | Dielectric withstand voltage |
|------|---------------------|-----|------------|---------------------------|------------------------------|
| M200 | 20@1MHz             | F   | 0.15%@1MHz | 1000G Ω                   | 2.5U <sub>R</sub>            |
| M400 | 40@1MHz             | F   | 0.15%@1MHz | 1000G Ω                   | 2.5U <sub>R</sub>            |
| M600 | 60@1MHz             | F   | 0.15%@1MHz | 1000G Ω                   | 2.5U <sub>R</sub>            |
| M101 | 100@1MHz            | F   | 0.15%@1MHz | 1000G Ω                   | 2.5U <sub>R</sub>            |
| M141 | 140@1MHz            | G   | 0.30%@1MHz | 1000G Ω                   | 2.5U <sub>R</sub>            |
| M221 | 220@1MHz            | G   | 0.30%@1MHz | 1000G Ω                   | 2.5U <sub>R</sub>            |
| M301 | 300@1MHz            | G   | 0.30%@1MHz | 1000G Ω                   | 2.5U <sub>R</sub>            |
| M601 | 600@1MHz            | G   | 0.30%@1MHz | 100G Ω                    | 2.5U <sub>R</sub>            |
| M901 | 900@1KHz            | P   | 0.50%@1KHz | 100G Ω                    | 2.5U <sub>R</sub>            |
| M252 | 2500@1KHz           | W   | 4.0%@1KHz  | 100G Ω                    | 2.5U <sub>R</sub>            |
| M402 | 4000@1KHz           | W   | 4.0%@1KHz  | 100G Ω                    | 2.5U <sub>R</sub>            |
| M902 | 9000@1KHz           | X   | 4.0%@1KHz  | 100G Ω                    | 2.5U <sub>R</sub>            |
| M153 | 15000@1MHz          | W   | 2.5%@1MHz  | 10G Ω                     | 2.5U <sub>R</sub>            |
| M253 | 25000@1MHz          | W   | 2.5%@1MHz  | 10G Ω                     | 2.5U <sub>R</sub>            |
| M353 | 35000@1MHz          | W   | 2.5%@1MHz  | 10G Ω                     | 2.5U <sub>R</sub>            |

**Capacity range and recommended capacity value**

| Size code | Tolerance range (pF) | Recommended chip capacitance value (pF)    |
|-----------|----------------------|--------------------------------------------|
| 0201      | 0.01~50              | 4.7、5.1、5.6、6.2、7.5、8.2、9.1、10;            |
| 0402      | 0.05~200             | 4.7、5.1、5.6、6.2、7.5、8.2、9.1、10、50、100、120; |
| 0603      | 0.10~500             | 10、50、100、120、200、220、470;                 |
| 0805      | 0.20~1000            | 10、50、100、120、200、220、470、680;             |
| 1206      | 0.50~2000            | 10、50、100、120、200、220、470、1000;            |

General military (General Army) radio frequency microwave single-layer chip capacitor series



1. Features:

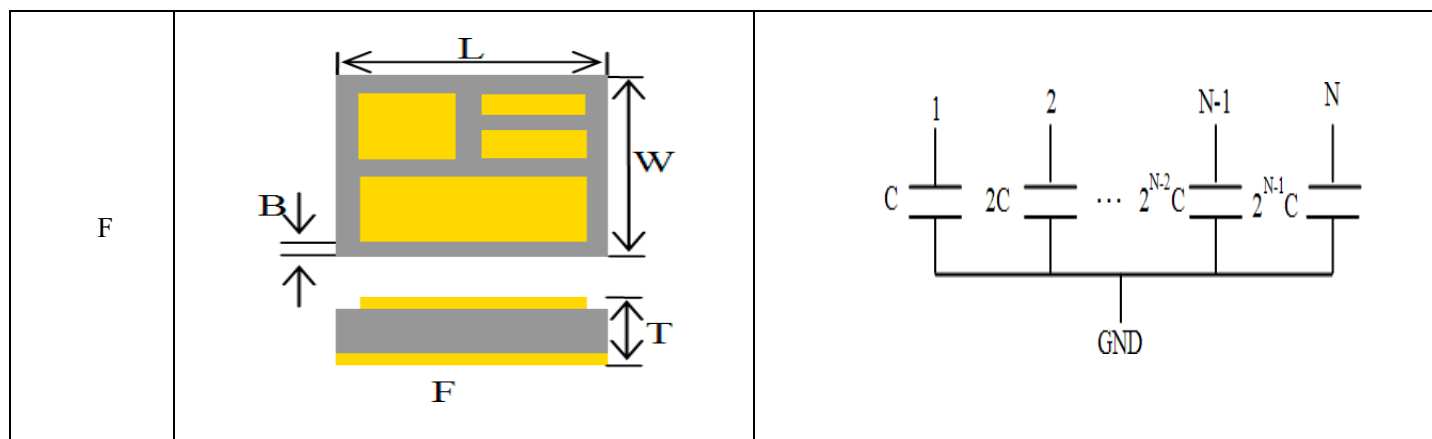
- Reduce the chip mounting area
- Reduce costs
- Capacity range: 0.10pF~1000pF
- Working temperature range: -55°C~+125°C

2. Product model specifications

|          |                     |                                                 |                                                                                               |                      |           |                                                                                                                                                 |            |                                                                                                                                                                                                            |
|----------|---------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| J-       | FHC                 | 1                                               | 151                                                                                           | 6                    | 25        | W                                                                                                                                               | E          | M                                                                                                                                                                                                          |
|          |                     |                                                 |                                                                                               |                      |           |                                                                                                                                                 |            |                                                                                                                                                                                                            |
| Grade    | Product code        | Operating voltage code                          | Nominal capacity                                                                              | Number of electrodes | Size code | TCC                                                                                                                                             | Case code  | Capacity accuracy                                                                                                                                                                                          |
| Military | FHC: Chip capacitor | 1: 100V<br>3: 63V<br>5: 50V<br>2: 25V<br>6: 16V | The first two digits are significant digits, and the last digit is a power of 10.<br>Unit: pF | 1~6                  | 15~40     | F: $0\pm30\text{ppm}/^{\circ}\text{C}$<br>G: $-3300\pm500\text{ppm}/^{\circ}\text{C}$<br>P: $+22\%, -33\%$<br>X: $+22\%, -82\%$<br>W: $\pm15\%$ | E<br><br>F | A: $\pm0.05\text{pF}$<br>B: $\pm0.10\text{pF}$<br>C: $\pm0.25\text{pF}$<br>D: $\pm0.50\text{pF}$<br>F: $\pm1.0\%$<br>J: $\pm5.0\%$<br>K: $\pm10.0\%$<br>L: $\pm15.0\%$<br>M: $\pm20.0\%$<br>O: $\pm40.0\%$ |

3. Shape structure, equivalent circuit diagram: Table 1 External structure and equivalent circuit diagram

| Code | Shape structure | Equivalent circuit diagram |
|------|-----------------|----------------------------|
| E    |                 |                            |



### 3. Dimensions

Table 2-1 E-type size code

Unit: mm/(inch)

| Size code | Number of electrode blocks | Long (L)    | Wide (W)    | Thick (T) | Electrode block width (S) | Electrode block gap span (G) |
|-----------|----------------------------|-------------|-------------|-----------|---------------------------|------------------------------|
| 15        | 02                         | 1.143±0.127 | 0.381±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 03                         | 1.651±0.127 | 0.381±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 04                         | 2.159±0.254 | 0.381±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 05                         | 2.667±0.254 | 0.381±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 06                         | 3.175±0.381 | 0.381±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
| 20        | 02                         | 1.143±0.127 | 0.508±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 03                         | 1.651±0.127 | 0.508±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 04                         | 2.159±0.254 | 0.508±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 05                         | 2.667±0.254 | 0.508±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 06                         | 3.175±0.381 | 0.508±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
| 25        | 02                         | 1.143±0.127 | 0.635±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 03                         | 1.651±0.127 | 0.635±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 04                         | 2.159±0.254 | 0.635±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 05                         | 2.667±0.254 | 0.635±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 06                         | 3.175±0.381 | 0.635±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
| 30        | 02                         | 1.143±0.127 | 0.762±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 03                         | 1.651±0.127 | 0.762±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 04                         | 2.159±0.254 | 0.762±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 05                         | 2.667±0.254 | 0.762±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 06                         | 3.175±0.381 | 0.762±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
| 35        | 02                         | 1.143±0.127 | 0.889±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 03                         | 1.651±0.127 | 0.889±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 04                         | 2.159±0.254 | 0.889±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 05                         | 2.667±0.254 | 0.889±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |
|           | 06                         | 3.175±0.381 | 0.889±0.127 | 0.20±0.06 | 0.381±0.127               | 0.127±0.10                   |

Remarks: 1) Product size can be customized according to customer requirements;

2) The length range depends on the number of electrode blocks.

Table 2-2 F-type size code

Unit: mm/(inch)

| Size code | Long (L)                     | Wide (W)                     | Thick (T)                    | Margin retention (B)         | Maximum number of electrode blocks N |
|-----------|------------------------------|------------------------------|------------------------------|------------------------------|--------------------------------------|
| 20        | 0.508±0.076<br>(0.020±0.003) | 0.508±0.076<br>(0.020±0.003) | 0.20±0.06<br>(0.0078±0.0024) | 0.051±0.025<br>(0.002±0.001) | 4                                    |
| 25        | 0.635±0.076<br>(0.025±0.003) | 0.635±0.076<br>(0.025±0.003) | 0.20±0.06<br>(0.0078±0.0024) | 0.051±0.025<br>(0.002±0.001) | 4                                    |
| 30        | 0.762±0.076<br>(0.030±0.003) | 0.762±0.076<br>(0.030±0.003) | 0.20±0.06<br>(0.0078±0.0024) | 0.051±0.025<br>(0.002±0.001) | 4                                    |
| 35        | 0.889±0.076<br>(0.035±0.003) | 0.889±0.076<br>(0.035±0.003) | 0.20±0.06<br>(0.0078±0.0024) | 0.051±0.025<br>(0.002±0.001) | 4                                    |
| 40        | 1.016±0.127<br>(0.040±0.005) | 1.016±0.127<br>(0.040±0.005) | 0.20±0.06<br>(0.0078±0.0024) | 0.051±0.025<br>(0.002±0.001) | 5                                    |

#### 4. Main electrical performance parameters

| Media code | Dielectric constant | TCC | Max loss   | Min insulation | Dielectric withstand |
|------------|---------------------|-----|------------|----------------|----------------------|
| M200       | 20@1MHz             | F   | 0.15%@1MHz | 1000G Ω        | 2.5U <sub>R</sub>    |
| M400       | 40@1MHz             | F   | 0.15%@1MHz | 1000G Ω        | 2.5U <sub>R</sub>    |
| M600       | 60@1MHz             | F   | 0.15%@1MHz | 1000G Ω        | 2.5U <sub>R</sub>    |
| M101       | 100@1MHz            | F   | 0.15%@1MHz | 1000G Ω        | 2.5U <sub>R</sub>    |
| M141       | 140@1MHz            | G   | 0.30%@1MHz | 1000G Ω        | 2.5U <sub>R</sub>    |
| M221       | 220@1MHz            | G   | 0.30%@1MHz | 1000G Ω        | 2.5U <sub>R</sub>    |
| M301       | 300@1MHz            | G   | 0.30%@1MHz | 1000G Ω        | 2.5U <sub>R</sub>    |
| M601       | 600@1MHz            | G   | 0.30%@1MHz | 100G Ω         | 2.5U <sub>R</sub>    |
| M901       | 900@1KHz            | P   | 0.50%@1KHz | 100G Ω         | 2.5U <sub>R</sub>    |
| M252       | 2500@1KHz           | W   | 4.0%@1KHz  | 100G Ω         | 2.5U <sub>R</sub>    |
| M402       | 4000@1KHz           | W   | 4.0%@1KHz  | 100G Ω         | 2.5U <sub>R</sub>    |
| M902       | 9000@1KHz           | X   | 4.0%@1KHz  | 100G Ω         | 2.5U <sub>R</sub>    |
| M153       | 15000@1MHz          | W   | 2.5%@1MHz  | 10G Ω          | 2.5U <sub>R</sub>    |
| M253       | 25000@1MHz          | W   | 2.5%@1MHz  | 10G Ω          | 2.5U <sub>R</sub>    |
| M353       | 35000@1MHz          | W   | 2.5%@1MHz  | 10G Ω          | 2.5U <sub>R</sub>    |

#### 5. Capacity range and recommended capacity value

| E | Size code | Tolerance range (pF) | Recommended chip capacitance value (pF) |
|---|-----------|----------------------|-----------------------------------------|
|   | 15        | 0.10~300             | 100、150、180、200、220;                    |
|   | 20        | 0.10~400             | 150、180、200、220、470;                    |
|   | 25        | 0.10~600             | 150、180、200、220、470;                    |
|   | 30        | 0.10~800             | 150、180、200、220、680;                    |
|   | 35        | 0.10~1000            | 150、180、200、220、680、1000;               |

| F | Size code | Tolerance range (pF)   | Recommended chip capacitance value (pF) |
|---|-----------|------------------------|-----------------------------------------|
|   | 20        | 0.10~25 (3 electrode)  | 0.5、0.75、1、15;                          |
|   | 25        | 0.10~50 (3 electrode)  | 0.5、0.75、1、15、22;                       |
|   | 30        | 0.10~80 (3 electrode)  | 0.5、0.75、1、15、22、33;                    |
|   |           | 0.10~40 (4 electrode)  |                                         |
|   | 35        | 0.10~140 (3 electrode) | 0.5、0.75、1、15、22、33、47;                 |
|   |           | 0.10~60 (4 electrode)  |                                         |
|   | 40        | 0.10~200 (3 electrode) | 0.5、0.75、1、15、22、33;                    |
|   |           | 0.10~80 (4 electrode)  |                                         |
|   |           | 0.10~40 (5 electrode)  |                                         |