

nichicon  
**MUSE F95**

FRAMELESS™



For SMD



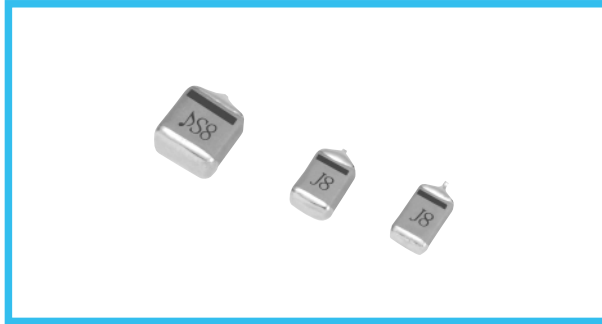
Smaller

For High  
Frequency

For Audio Use

Conformal coated Chip, For Mobile Audio

- Compliant to the RoHS directive (2002/95/EC).



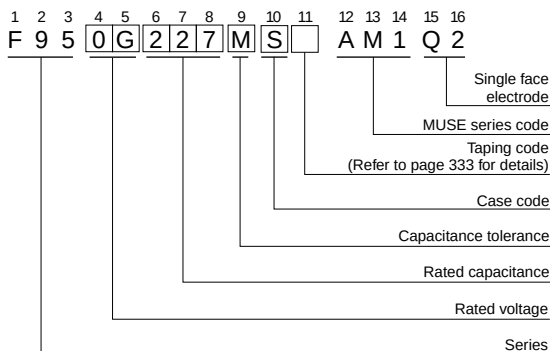
#### Applications

- Mobile Audio Player
- Smartphone
- Mobile phone
- Wireless Microphone System

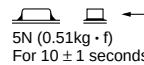
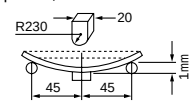
#### Feature

- Rich sound in the bass register and clear sound. Materials are strictly selected to achieve high level sound. F95 series has no lead-frame, and no vibration factor.
- Low ESR, Low ESL
- Line up miniature size and high capacitance, necessary to mobile design.

#### Type numbering system (Example : 4V 220μF)

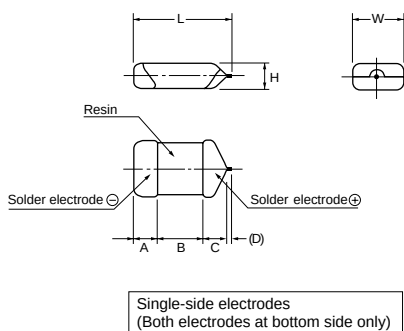


#### Specifications

| Item                              | Performance Characteristics                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Category                          | Temperature Range                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Temperature Range                 | -55 to +125°C (Rated temperature : +85°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Capacitance Tolerance             | ±20%, ±10% (at 120Hz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Dissipation Factor (at 120Hz)     | Refer to next page                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| ESR(100kHz)                       | Refer to next page                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Leakage Current                   | Refer to next page<br>Provided that<br>• After 1 minute's application of rated voltage, leakage current at 85°C, 10 times or less than 20°C specified value.<br>• After 1 minute's application of rated voltage, leakage current at 125°C, 12.5 times or less than 20°C specified value.                                                                                                                                                                                                    |
| Capacitance Change by Temperature | +15% Max. (at +125°C)<br>+10% Max. (at +85°C)<br>-10% Max. (at -55°C)                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Damp Heat (Steady State)          | At 40°C, 90 to 95% R.H., For 500 hours (No voltage applied)<br>Capacitance Change ..... Refer to next page (*1)<br>Dissipation Factor ..... Initial specified value or less<br>Leakage Current ..... Initial specified value or less                                                                                                                                                                                                                                                        |
| Temperature Cycles                | At -55°C / +125°C, 30 minutes each, For 5 cycles,<br>Capacitance Change ..... Refer to next page (*1)<br>Dissipation Factor ..... Initial specified value or less<br>Leakage Current ..... Initial specified value or less                                                                                                                                                                                                                                                                  |
| Resistance to Soldering Heat      | 10 seconds reflow at 260°C, 10 seconds immersion at 260°C<br>Capacitance Change ..... Refer to next page (*1)<br>Dissipation Factor ..... Initial specified value or less<br>Leakage Current ..... Initial specified value or less                                                                                                                                                                                                                                                          |
| Surge*                            | After application of surge voltage in series with a 33Ω resistor at the rate of 30 seconds ON, 30 seconds OFF, for 1000 successive test cycles at 85°C, capacitors shall meet the characteristic requirements table below.<br>Capacitance Change ..... Refer to next page (*1)<br>Dissipation Factor ..... Initial specified value or less<br>Leakage Current ..... Initial specified value or less                                                                                         |
| Endurance*                        | After 2000 hours' application of rated voltage at 85°C, capacitors shall meet the characteristic requirements table below.<br>Capacitance Change ..... Refer to next page (*1)<br>Dissipation Factor ..... Initial specified value or less<br>Leakage Current ..... Initial specified value or less                                                                                                                                                                                         |
| Shear Test                        | After applying the pressure load of 5N for 10±1 seconds horizontally to the center of capacitor side body which has no electrode and has been soldered beforehand on a substrate, there shall be found neither exfoliation nor its sign at the terminal electrode.<br>                                                                                                                                 |
| Terminal Strength                 | Keeping a capacitor surface-mounted on a substrate upside down and supporting the substrate at both of the opposite bottom points 45mm apart from the center of capacitor, the pressure strength is applied with a specified jig at the center of substrate so that the substrate may bend by 1mm as illustrated. Then, there shall be found no remarkable abnormality on the capacitor terminals.<br> |

\* As for the surge voltage, refer to page 332 for details.

#### Drawing



#### Dimensions

| Case code | L         | W          | H         | A         | B         | C         | (D)   |
|-----------|-----------|------------|-----------|-----------|-----------|-----------|-------|
| P         | 2.2 ± 0.3 | 1.25 ± 0.3 | 1.0 ± 0.2 | 0.6 ± 0.3 | 0.8 ± 0.3 | 0.8 ± 0.3 | (0.2) |
| S         | 3.2 ± 0.3 | 1.6 ± 0.3  | 1.0 ± 0.2 | 0.8 ± 0.3 | 1.2 ± 0.3 | 0.8 ± 0.3 | (0.2) |
| A         | 3.2 ± 0.3 | 1.7 ± 0.3  | 1.4 ± 0.2 | 0.8 ± 0.3 | 1.2 ± 0.3 | 0.8 ± 0.3 | (0.2) |
| T         | 3.5 ± 0.2 | 2.7 ± 0.2  | 1.0 ± 0.2 | 0.8 ± 0.2 | 1.2 ± 0.2 | 1.1 ± 0.2 | (0.2) |
| B         | 3.5 ± 0.2 | 2.8 ± 0.2  | 1.8 ± 0.2 | 0.8 ± 0.3 | 1.2 ± 0.3 | 1.1 ± 0.3 | (0.2) |

D dimension only for reference


**MUSE F95**

## ■ Standard Ratings

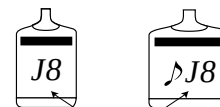
| Cap.<br>(μF) | V    | 4           | 6.3           | 10 |
|--------------|------|-------------|---------------|----|
|              | Code | 0G          | 0J            | 1A |
| 68           | 686  | S           | S             | B  |
| 100          | 107  | S           | S • T         | B  |
| 150          | 157  | S           | (A)           |    |
| 220          | 227  | (P) • S • T | (A) • (T) • B |    |
| 330          | 337  | T           | B             |    |
| 470          | 477  | (T) • B     | (B)           |    |
| 680          | 687  | (T) • (B)   |               |    |

( ) The series in parentheses are being developed.

Please contact to your local Nichicon sales office when these series are being designed in your application.

## ■ Marking

S-A case T-B Case



Rated Capacitance code

| μF   | 68 | 100 | 150 | 220 | 330 | 470 | 680 |
|------|----|-----|-----|-----|-----|-----|-----|
| code | W7 | A8  | E8  | J8  | N8  | S8  | W8  |

P case - No marking on part.

## ■ Standard Ratings

| Rated Volt | Rated Capacitance (μF) | Case code | Part Number      | *2 Leakage Current (μA) | Dissipation Factor (%@120Hz) | ESR (Ω@100kHz) | *1 ΔC/C (%) |
|------------|------------------------|-----------|------------------|-------------------------|------------------------------|----------------|-------------|
| 4V         | 68                     | S         | F950G686MSAAM1Q2 | 2.7                     | 10                           | 0.8            | *           |
|            | 100                    | S         | F950G107MSAAM1Q2 | 4.0                     | 14                           | 0.8            | *           |
|            | 150                    | S         | F950G157MSAAM1Q2 | 6.0                     | 22                           | 0.8            | ± 15        |
|            | 220                    | S         | F950G227MSAAM1Q2 | 8.8                     | 30                           | 0.8            | ± 15        |
|            | 220                    | T         | F950G227MTAAM1Q2 | 8.8                     | 25                           | 0.6            | *           |
|            | 330                    | T         | F950G337MTAAM1Q2 | 13.2                    | 40                           | 0.8            | ± 20        |
|            | 470                    | B         | F950G477MBAAM1Q2 | 18.8                    | 40                           | 0.4            | ± 20        |
| 6.3V       | 68                     | S         | F950J686MSAAM1Q2 | 4.3                     | 14                           | 0.9            | *           |
|            | 100                    | S         | F950J107MSAAM1Q2 | 6.3                     | 20                           | 0.9            | ± 15        |
|            | 100                    | T         | F950J107MTAAM1Q2 | 6.3                     | 14                           | 0.6            | *           |
|            | 220                    | B         | F950J227MBAAM1Q2 | 13.9                    | 30                           | 0.4            | *           |
|            | 330                    | B         | F950J337MBAAM1Q2 | 20.8                    | 35                           | 0.6            | ± 20        |
| 10V        | 68                     | B         | F951A686MBAAM1Q2 | 6.8                     | 12                           | 0.4            | *           |
|            | 100                    | B         | F951A107MBAAM1Q2 | 10.0                    | 14                           | 0.4            | *           |

※ In case of capacitance tolerance ± 10% type, [K] will be put at 9th digit of type numbering system.

\*1 : ΔC/C Marked "※"

| Item                      | S • A • T • B Case (%) |
|---------------------------|------------------------|
| Damp Heat                 | ±10                    |
| Temperature cycles        | ±5                     |
| Resistance soldering heat | ±5                     |
| Surge                     | ±5                     |
| Endurance                 | ±10                    |

\*2 : Leakage Current

After 1 minute's application of rated voltage, leakage current at 20°C.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

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Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
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- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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