

# KAM15AR71C182MT Datasheet

(0603 16 V X7R 1.8nF ±20% AEC-Q200)

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## Dimensions

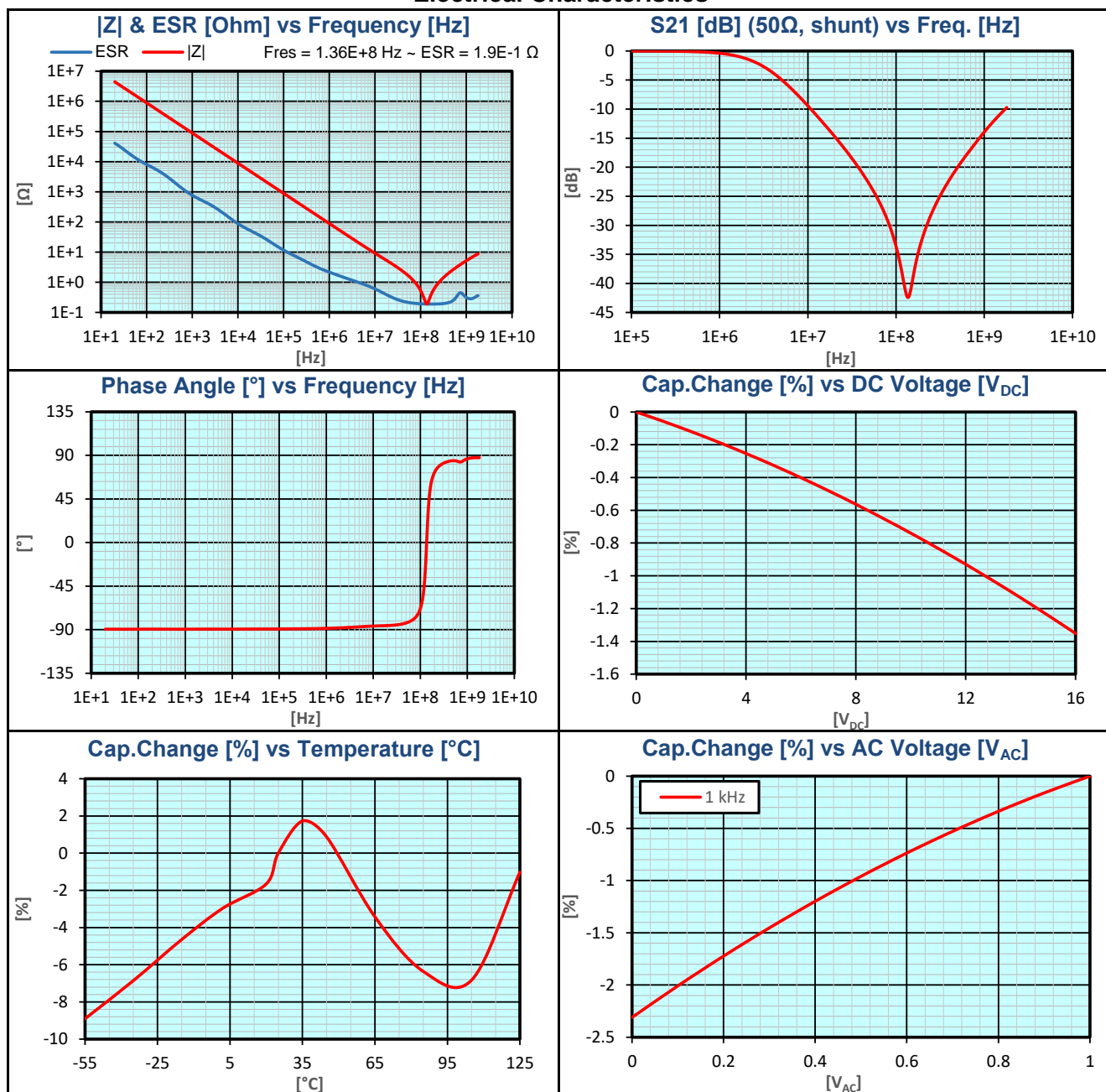


|        | millimetres | inches        |
|--------|-------------|---------------|
| L      | 1.6 ± 0.15  | 0.063 ± 0.006 |
| W      | 0.81 ± 0.15 | 0.032 ± 0.006 |
| T max. | 0.9         | 0.035         |
| t      | 0.35 ± 0.15 | 0.014 ± 0.006 |

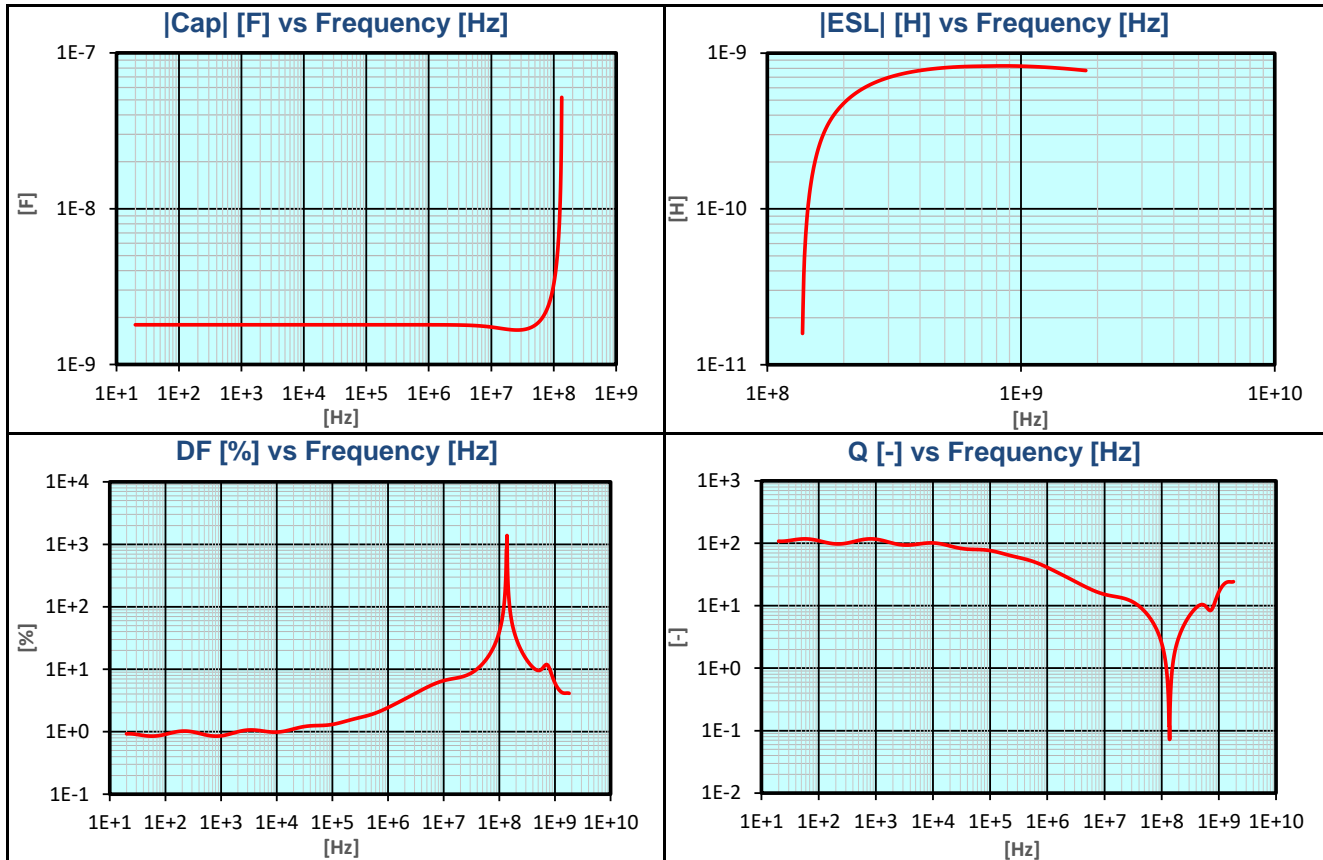
## Basic Specifications

| Item                  | Unit | Spec.           | Conditions          |
|-----------------------|------|-----------------|---------------------|
| Capacitance           | nF   | 1.44 to 2.16    | @ 1 kHz, 1 Vrms     |
| DF                    | %    | 3.5 max.        | @ 1 kHz, 1 Vrms     |
| IR                    | GΩ   | 100 min.        | @ 16 Vdc, t = 120 s |
| DWV                   | Vdc  | 40              | @ I ≤ 50mA, t ≤ 5 s |
| Operating Temperature |      | -55°C to +125°C |                     |
| Dielectric            |      | X7R             |                     |
| Product Level         |      | AEC-Q200        |                     |
| RoHS Compliant        |      | Yes             |                     |
| Termination           |      | Sn              |                     |

## Electrical Characteristics



## Electrical Characteristics



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## Part Number Information

| K       | G              | M  | 21         | C           | R5          | 1E                  | 103                                  | K           | T        | ###                            |
|---------|----------------|--|------------|-------------|-------------|---------------------|--------------------------------------|-------------|----------|--------------------------------|
| Symbol: | Product Level: | Requirement:                             | Size:      | Thickness:  | Dielectric: | Voltage:            | Capacitance:                         | Tolerance:  | Packing: | Optional:                      |
| KAVX    | G General      | M Standard                               | Code: EIA: | See catalog | CG C0G      | Multiplier: Base:   | (2 significant digits + no of zeros) | A ± 0.05 pF | H        | See catalog for optional codes |
|         | A Automotive   | U Hi-Q (Special function)                | 02 01005   | for list of | R5 X5R      | 0 1x A 1            |                                      | B ± 0.1 pF  | T        |                                |
|         | (AEC-Q200)     | E ESD (Special function)                 | 03 0201    | codes       | S6 X6S      | 1 10x N 1.5         |                                      | C ± 0.25 pF | U        |                                |
|         | M Medical      | L Low Inductance reverse Geometry        | 05 0402    |             | T6 X6T      | 2 100x D 2          | Examples:                            | D ± 0.5 pF  | Y        |                                |
|         |                | A Low Inductance LGA                     | 15 0603    |             | R7 X7R      | 3 1000x E 2.5       | 100 = 10 pF                          | F ± 1 %     | V        |                                |
|         |                | F Flexitem (Special function/structure)  | 21 0805    |             | S7 X7S      | U 3                 | 102 = 1000 pF                        | G ± 2 %     |          |                                |
|         |                | S Flexisafe (Special function/structure) | 31 1206    |             | T7 X7T      | V 3.5               | 224 = 220 nF                         | J ± 5 %     | M        |                                |
|         |                | G Gold Termination (Special Structure)   | 32 1210    |             | R8 X8R      | G 4                 | 105 = 1 µF                           | K ± 10 %    | L        |                                |
|         |                | C IDC (Special structure)                | 42 1808    |             | L8 X8L      | H 5                 |                                      | M ± 20 %    | N        |                                |
|         |                | Q Ultra Low ESR                          | 43 1812    |             | G8 X8G      | J 6.3               |                                      |             | K        |                                |
|         |                |  | 44 1825    |             | V5 Y5V      |                     |                                      |             | S        |                                |
|         |                |  | 55 2220    |             |             | Example:            |                                      |             |          |                                |
|         |                |  | 56 2225    |             |             | 1E = 25V (10 x 2.5) |                                      |             | X        | Waffle pack                    |
|         |                |  | 91 3640    |             |             |                     |                                      |             |          |                                |

**Note:**  
\* See catalog for more information.

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