

# KGM05AR71E104KH Datasheet

(0402 25 V X7R 100nF ±10%)

To download data and simulation models visit: **SpiCAT** ONLINE TOOL



## Dimensions

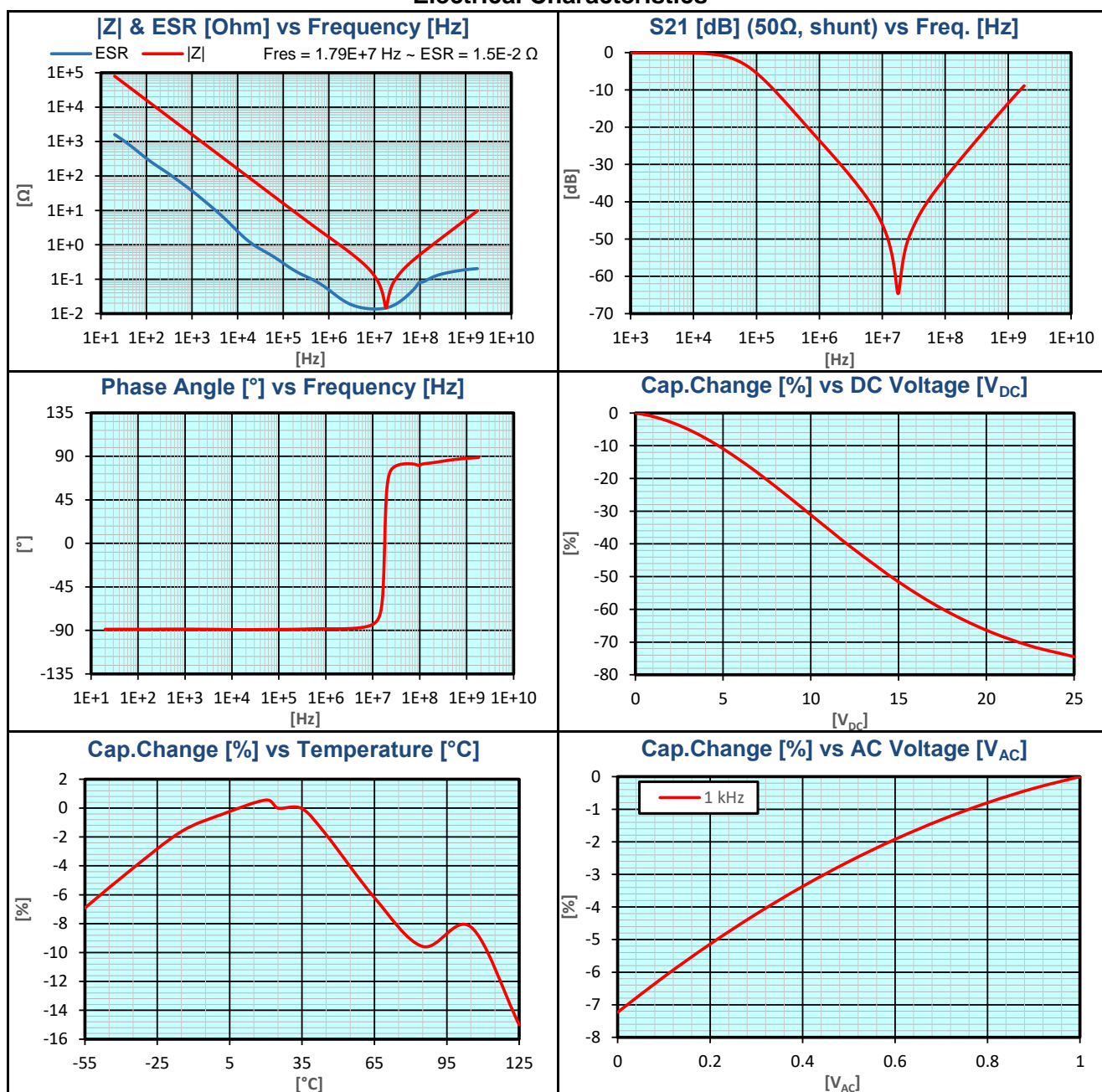


|        | millimetres | inches        |
|--------|-------------|---------------|
| L      | 1 ± 0.1     | 0.039 ± 0.004 |
| W      | 0.5 ± 0.1   | 0.02 ± 0.004  |
| T max. | 0.56        | 0.022         |
| t      | 0.25 ± 0.15 | 0.01 ± 0.006  |

## Basic Specifications

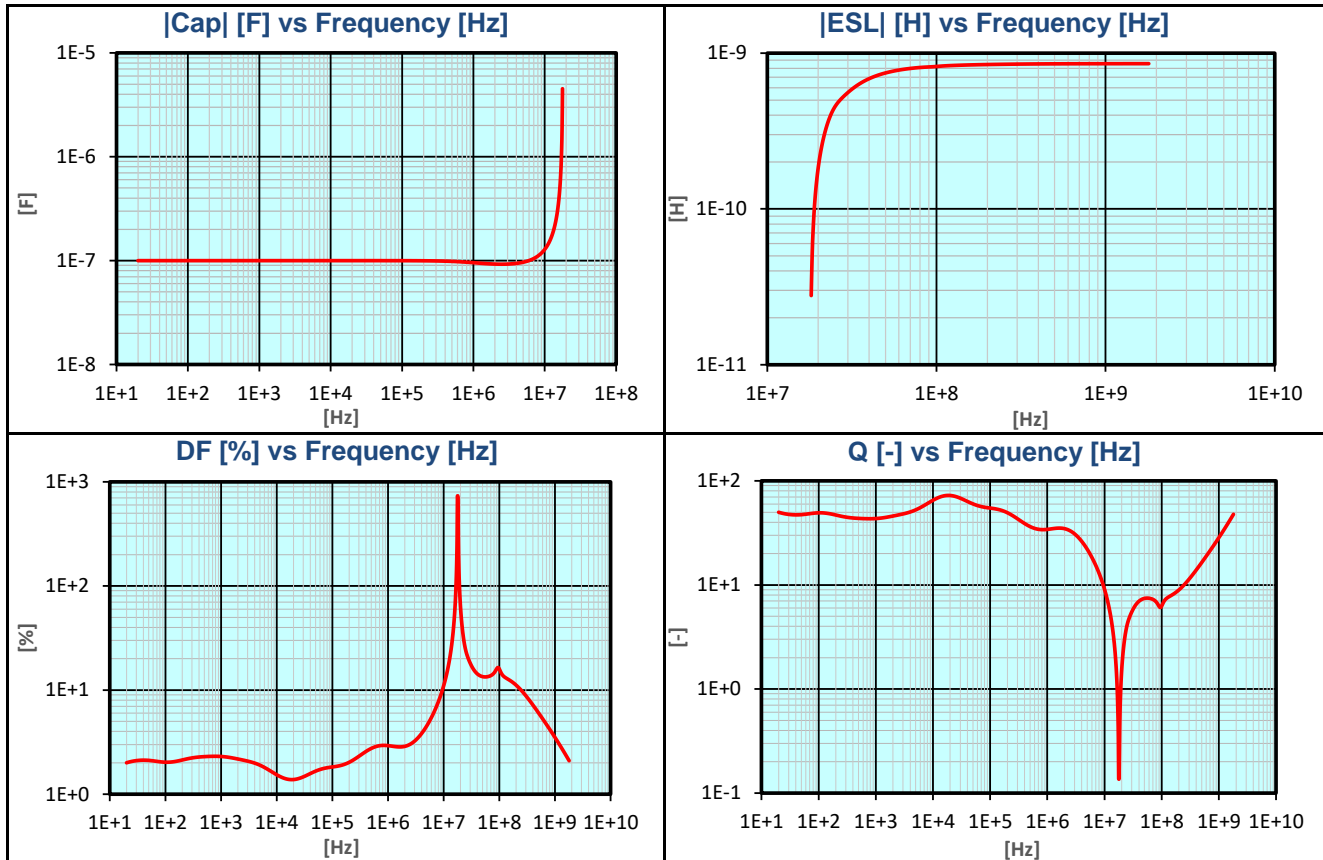
| Item                  | Unit | Spec.           | Conditions          |
|-----------------------|------|-----------------|---------------------|
| Capacitance           | nF   | 90 to 110       | @ 1 kHz, 1 Vrms     |
| DF                    | %    | 12.5 max.       | @ 1 kHz, 1 Vrms     |
| IR                    | GΩ   | 10 min.         | @ 25 Vdc, t = 120 s |
| DWV                   | Vdc  | 62.5            | @ I ≤ 50mA, t ≤ 5 s |
| Operating Temperature |      | -55°C to +125°C |                     |
| Dielectric            |      | X7R             |                     |
| Product Level         |      | General         |                     |
| RoHS Compliant        |      | Yes             |                     |
| Termination           |      | Sn              |                     |

## Electrical Characteristics



(0402 25 V X7R 100nF  $\pm 10\%$ )

## Electrical Characteristics



# KGM05AR71E104KH Datasheet



(0402 25 V X7R 100nF ±10%)

## 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 codes | R5 X5R      | 0 1x A 1            |                                      | B ± 0.1 pF  | T        |                                |
|         | (AEC-Q200)     | E ESD (Special function)                 | 03 0201    |                   | 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.

**NOTICE:** Specifications are subject to change without notice. All statements, information and data given herein are believed to be accurate and reliable, but are presented without guarantee or responsibility of any kind, expressed or implied. Specifications are typical and may not apply to all applications.