

## Multilayer Ceramic Chip Capacitors

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Cross Reference

Catalog

Tech Notes

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C1005X8R2A102K050BA



**TDK item description** ? C1005X8R2A102KT\*\*\*\*

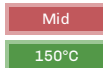
### Applications



Commercial Grade

Please refer to Part No. [CGA2B2X8R2A102K050BA](#) for Automotive use.

### Feature



Mid Voltage (100 to 630V)



High Temperature Application

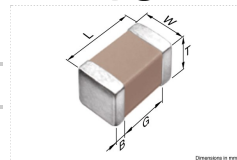
### Series

C1005 [EIA 0402]

### Status



Production



Images are for reference only and show exemplary products.

PDF file of this page



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### Documents

Catalog

Specification

RoHS Certificate

SVHC/REACH Certificate

Characterization Sheet

Promotion Video

Sample Kits

### Size

|                               |                  |
|-------------------------------|------------------|
| Length(L)                     | 1.00mm ±0.05mm   |
| Width(W)                      | 0.50mm ±0.05mm   |
| Thickness(T)                  | 0.50mm ±0.05mm   |
| Terminal Width(B)             | 0.10mm Min.      |
| Terminal Spacing(G)           | 0.30mm Min.      |
| Recommended Land Pattern (PA) | 0.30mm to 0.50mm |
| Recommended Land Pattern (PB) | 0.35mm to 0.45mm |
| Recommended Land Pattern (PC) | 0.40mm to 0.60mm |

### Electrical Characteristics

|                              |           |
|------------------------------|-----------|
| Capacitance                  | 1nF ±10%  |
| Rated Voltage                | 100VDC    |
| Temperature Characteristic ? | X8R(±15%) |
| Dissipation Factor (Max.)    | 3%        |
| Insulation Resistance (Min.) | 10000MΩ   |

### Other

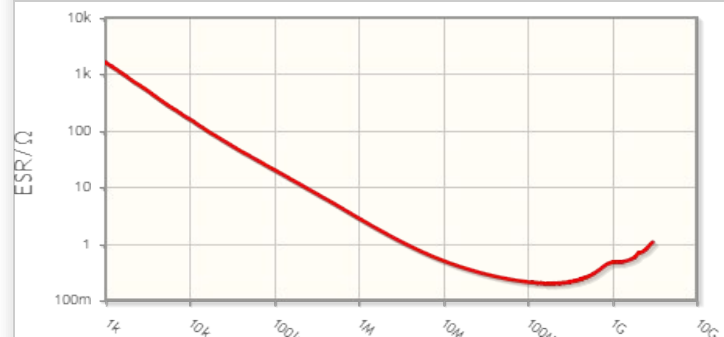
|                  |                                    |
|------------------|------------------------------------|
| Soldering Method | Reflow                             |
| AEC-Q200         | No                                 |
| Packing          | Punched (Paper)Taping [180mm Reel] |
| Package Quantity | 10000pcs                           |

## Characteristic Graph (This is reference data, and does not guarantee the products characteristics.)

### Impedance



### ESR



Frequency/Hz

C1005X8R2A102K050BA

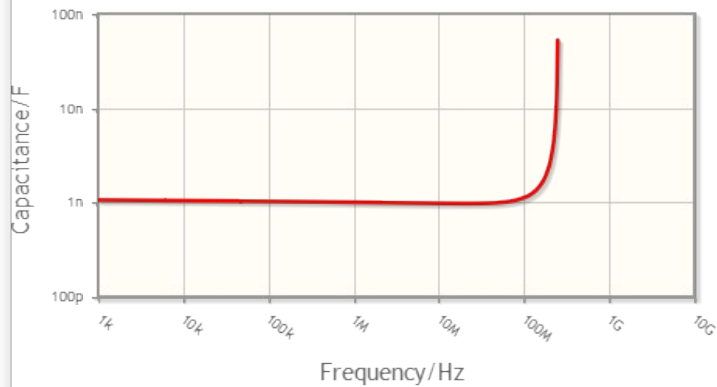
Change settings

Frequency/Hz

C1005X8R2A102K050BA

Change settings

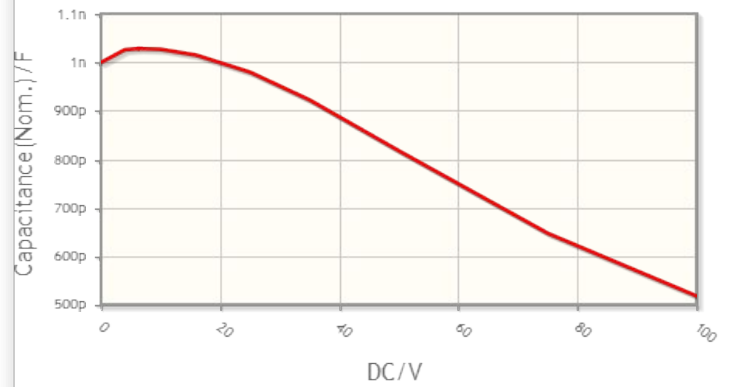
### Capacitance



C1005X8R2A102K050BA

Change settings

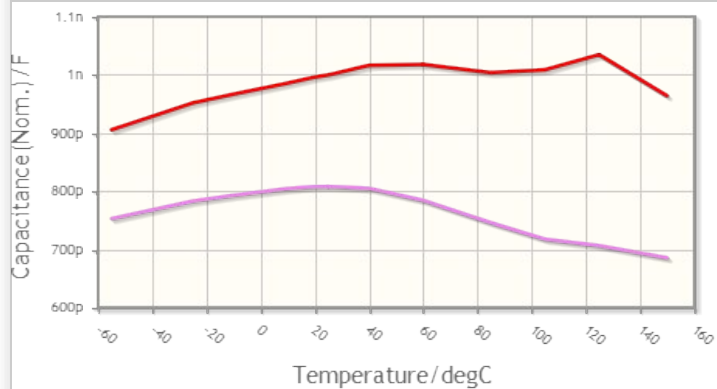
### DC Bias Characteristic



C1005X8R2A102K050BA

Change settings

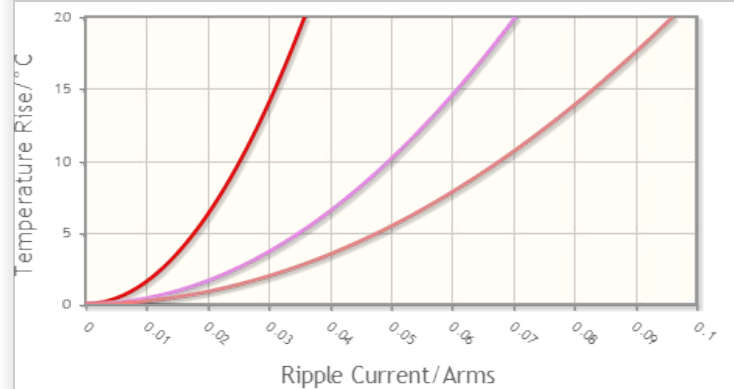
### Temperature Characteristic



C1005X8R2A102K050BA(No Bias) C1005X8R2A102K050BA(DC Bias = 50V)

Change settings

### Ripple Temperature Rising



C1005X8R2A102K050BA(100k Hz) C1005X8R2A102K050BA(500k Hz) C1005X8R2A102K050BA(1M Hz)

Change settings

## Products

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- |                                                      |                                                                               |
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| » Inductors (Coils)                                  | » Power Supplies                                                              |
| » EMC Components                                     | » Magnets                                                                     |
| » RF Components and Modules                          | » Flash Storages                                                              |
| » Voltage / Current / Temperature Protection Devices | » Wireless Power Transfer                                                     |
| » Sensors and Sensor Systems                         | » FA Systems                                                                  |
| » Ceramic Switching / Heating, Piezo Components,     | » Transparent Conductive Film                                                 |
| Buzzers and Microphones                              | » Micro Modules (Substrates with Built-in ICs, Products Utilizing with SESUB) |
| » Transformers                                       | » Solar Cells                                                                 |
| » Ferrites and Accessories                           | » Biosensor                                                                   |
| » Noise Suppressing / Magnetic Sheet                 |                                                                               |

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