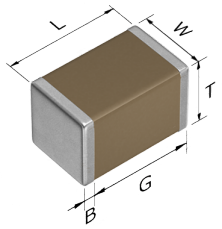
# Multilayer Ceramic Chip Capacitors

## C2012X8R1H104K125AA

| | |
|---|---|
| **Product Status** | Production |
| **TDK Item Description** | C2012X8R1H104KT**** |
| **Applications** | Commercial Grade<br>Please refer to Part No. CGA4J2X8R1H104K125AA for Automotive use. |
| **Feature** | 150°CHigh Temperature Application |
| **Series** | C2012 [EIA 0805] |
| **Brand** | TDK |
| **Environmental Compliance** | RoHS, REACH, Halogen Free, Lead Free |




| Size | |
|---|---|
| Length(L) | 2.00mm ±0.20mm |
| Width(W) | 1.25mm ±0.20mm |
| Thickness(T) | 1.25mm ±0.20mm |
| Terminal Width(B) | 0.20mm Min. |
| Terminal Spacing(G) | 0.50mm Min. |
| Recommended Land Pattern (PA) | 1.00mm to 1.30mm(Flow Soldering)<br>0.90mm to 1.20mm(Reflow Soldering) |
| Recommended Land Pattern (PB) | 1.00mm to 1.20mm(Flow Soldering)<br>0.70mm to 0.90mm(Reflow Soldering) |
| Recommended Land Pattern (PC) | 0.80mm to 1.10mm(Flow Soldering)<br>0.90mm to 1.20mm(Reflow Soldering) |

| Electrical Characteristics | |
|---|---|
| Capacitance | 100nF ±10% |
| Rated Voltage | 50VDC |
| Temperature Characteristic | X8R(±15%) |
| Dissipation Factor (Max.) | 3% |
| Insulation Resistance (Min.) | 5000MΩ |

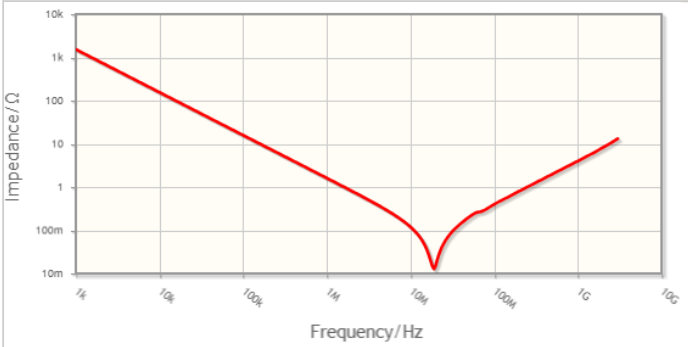
| Other | |
|---|---|
| Operating Temp. Range | -55 to 150°C |
| Soldering Method | Wave (Flow)<br>Reflow |
| AEC-Q200 | NO |
| Packing | Embossed (Plastic)Taping [180mm Reel] |
| Package Quantity | 2000pcs |

! Images are for reference only and show exemplary products.
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! All specifications are subject to change without notice.

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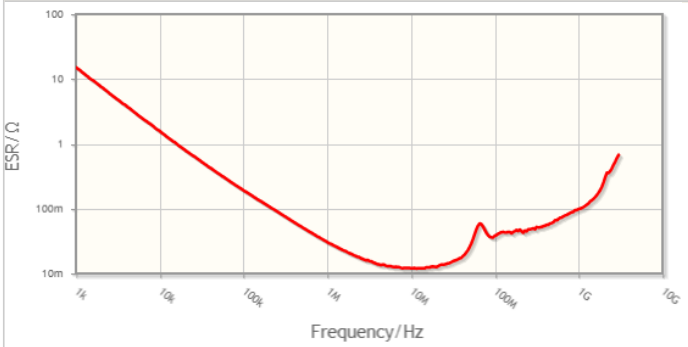
# Characteristic Graphs(This is reference data, and does not guarantee the products characteristics.)

## Impedance



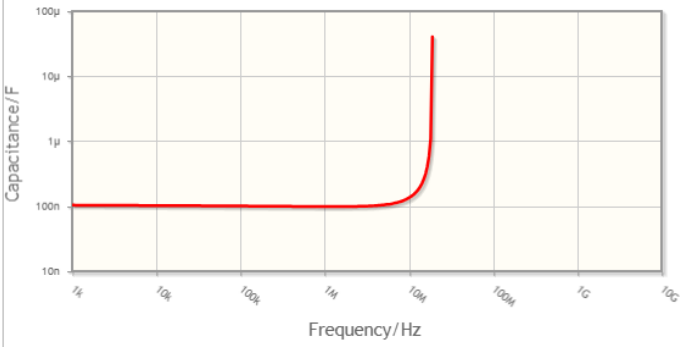

C2012X8R1H104K125AA

## ESR



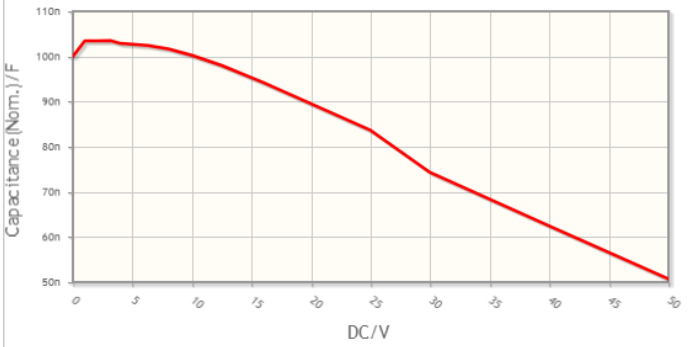

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## Capacitance



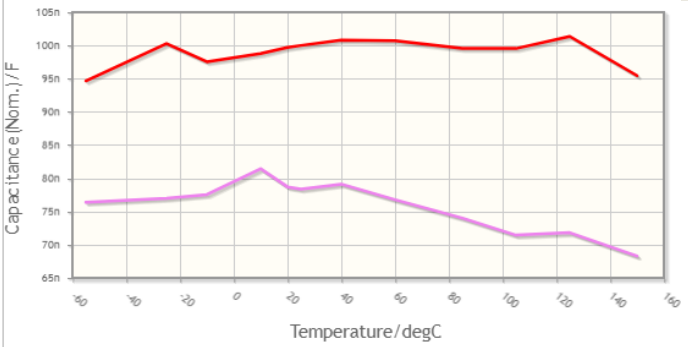

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## DC Bias Characteristic



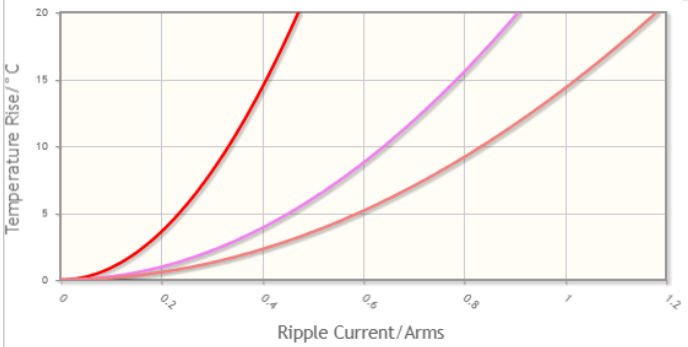

C2012X8R1H104K125AA

## Temperature Characteristic




C2012X8R1H104K125AA(No Bias) C2012X8R1H104K125AA(DC Bias = 25V )

## Ripple Temperature Rising




C2012X8R1H104K125AA(100kHz) C2012X8R1H104K125AA(500kHz) C2012X8R1H104K125AA(1MHz)

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## Associated Images

Land Pattern (Terminal Connection)




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