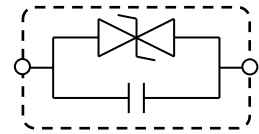


Multilayer Chip Varistor for LIN & CXPI

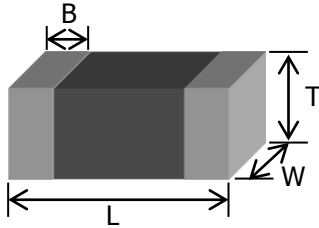
Features

- EIA00603 (1.6x0.8mm) chip size.
- Excellent ESD clamp characteristics that is very superior to the present products.
- Operating temperature range from -40°C to 125°C
- This product is compliant with the AEC-Q200 standard.

Equivalent Circuit

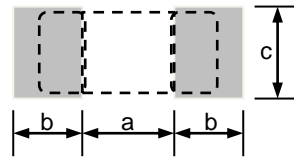


Shapes & Dimensions



| | Unit / mm | | | |
|------|-----------|---------|---------|----------|
| EIA | L | W | T | B |
| 0603 | 1.6±0.1 | 0.8±0.1 | 0.8±0.1 | 0.2 Min. |

Recommended PCB Pattern



| | Unit / mm | | |
|------|------------|------------|------------|
| EIA | a | b | c |
| 0603 | 0.6 to 0.8 | 0.6 to 0.8 | 0.6 to 0.8 |

Product Identification

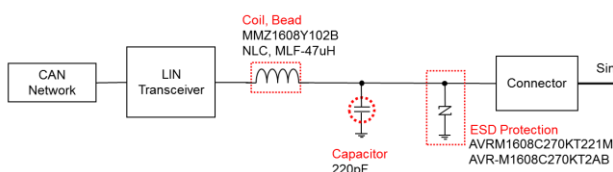
| AVRM | 1608 | C | 270 | K | I | 221 | M |
|------|---|-----|-----|-----|-----|-----|-----|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| (1) | Series name / AVRM | | | | | | |
| (2) | Dimension / 1608:1.6x0.8(mm) | | | | | | |
| (3) | Structure | | | | | | |
| (4) | Varistor voltage / 270:27x10 ⁰ (V) | | | | | | |
| (5) | Varistor voltage tolerance / M:±20(%), K:±10(%) | | | | | | |
| (6) | Packaging scheme / T:Taping | | | | | | |
| (7) | Capacitance / 221:22x10 ¹ (pF) | | | | | | |
| (8) | Capacitance tolerance / M:±20(%) | | | | | | |

Electrical Characteristics

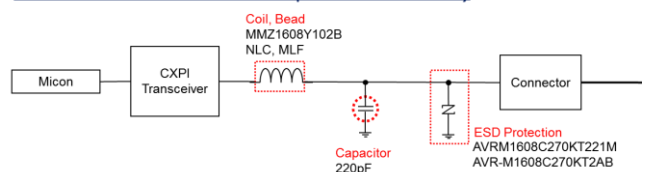
| TDK Product Name | Varistor voltage (Breakdown voltage) | Rated voltage | Clamping voltage | Energy | Peak current | Capacitance |
|--------------------|---|---------------|------------------|-----------|--------------|--------------|
| | DC1mA | DC | 8/20µs | 10/1000µs | 8/20µs | 1kHz, 1Vrms |
| | V1mA | Max. | Typ. | Max. | Max. | Typ. |
| | (V) | Vdc | Vcl | E | Ip | C |
| | (V) | (V) | (V) | (Joule) | (A) | (pF) |
| AVRM1608C270KT221M | 27(24~30) | 19 | 52 | 2 | 0.1 | 56 |
| | | | | | | 220(176~264) |

Example

LIN (Local Interconnect Network)



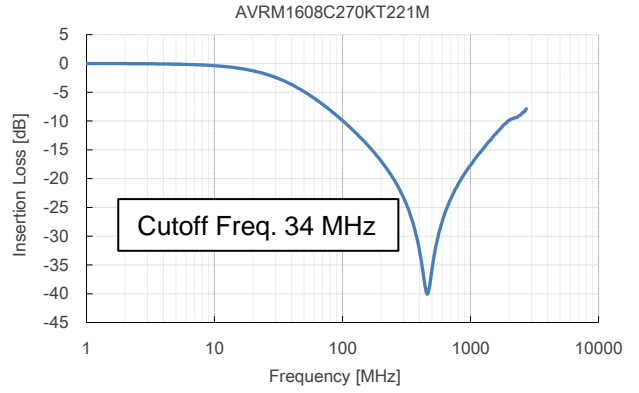
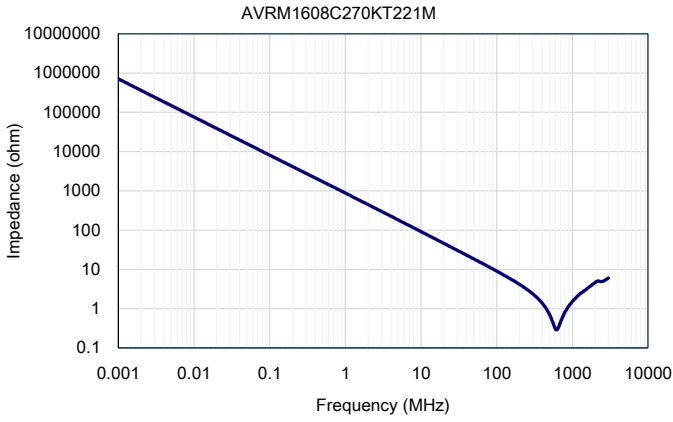
CXPI (Clock Extension Peripheral Interface)



Multilayer Chip Varistor

Frequency Characteristics

Transmission Characteristics



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TDK:](#)

[AVRM1608C270KT221M](#) [AVR-M1608C270KT221M](#)