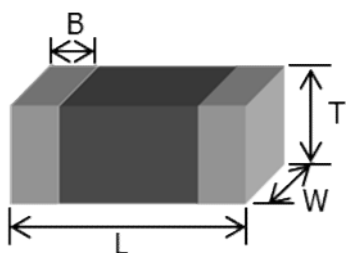


## ESD Notch Filters : AVR041A150MT242

### Features

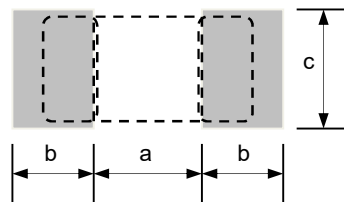
- Suppression of TDMA noise by wireless communications
- Improved receiver sensitivity for wireless communications
- Electronic circuits is protected from ESD with the adoption of varistor material
- Commercial grade
- Size : EIA01005 (0.4x0.2mm)
- High ESD durability : IEC61000-4-2, 8kV (Level4)
- Operating temperature range : -40℃ ~ 85℃

### Shapes & Dimensions



| Unit / mm |          |          |          |           |
|-----------|----------|----------|----------|-----------|
| EIA       | L        | W        | T        | B         |
| 01005     | 0.4±0.02 | 0.2±0.02 | 0.2±0.02 | 0.07 Min. |

### Recommended PCB Pattern



| Unit / mm |      |              |              |
|-----------|------|--------------|--------------|
| EIA       | a    | b            | c            |
| 01005     | 0.20 | 0.15 to 0.20 | 0.18 to 0.20 |

### Product Identification

|             |           |           |            |          |          |            |
|-------------|-----------|-----------|------------|----------|----------|------------|
| <b>AVRF</b> | <b>04</b> | <b>1A</b> | <b>150</b> | <b>M</b> | <b>T</b> | <b>242</b> |
| (1)         | (2)       | (3)       | (4)        | (5)      | (6)      | (7)        |

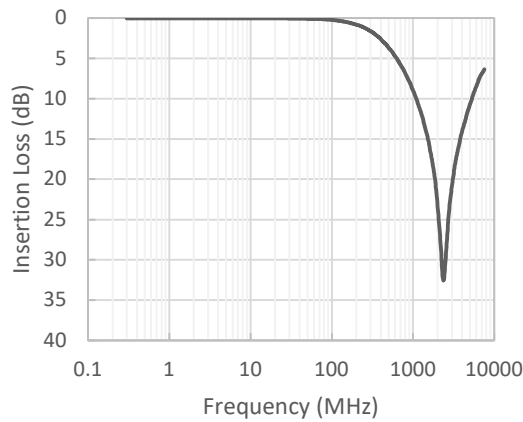
|     |                                                |
|-----|------------------------------------------------|
| (1) | Series name / AVR Series                       |
| (2) | Dimension / 04:0.4x0.2(mm)                     |
| (3) | Maximum continuous voltage / 1A : 10(V)        |
| (4) | Capacitance / 150:15x10 <sup>-1</sup> (pF)     |
| (5) | Capacitance tolerance / M : ±20(%)             |
| (6) | Packaging scheme / T : Taping                  |
| (7) | Insertion loss / 242:24x10 <sup>-2</sup> (MHz) |

### Electrical Characteristics

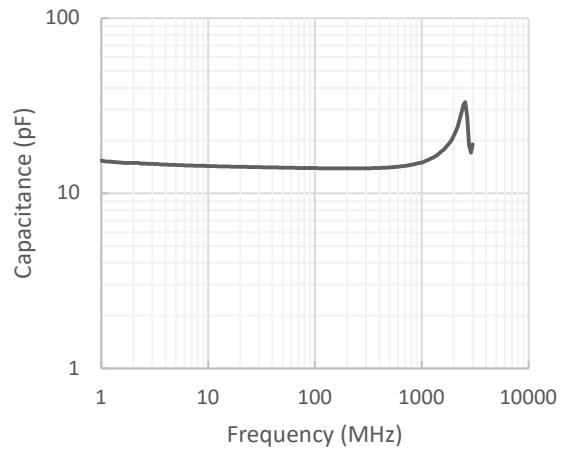
| TDK Product Name | Insertion Loss | Rated voltage | Breakdown voltage | Capacitance | ESD durability IEC-61000-4-2 | Application    |
|------------------|----------------|---------------|-------------------|-------------|------------------------------|----------------|
|                  |                | DC            | DC1mA             | 1MHz,1Vrms  | 150pF/330Ω                   |                |
|                  | Min.           | Max.          |                   |             |                              |                |
|                  | IL             | Vdc           | Vbr               | C           |                              |                |
|                  | (dB)           | (V)           | (V)               | (pF)        |                              |                |
| AVRF041A150MT242 | 20 (2.4GHz)    | 10            | 16 (12.8~19.2)    | 15 (12~18)  | 8kV (Level4)                 | WiFi/Bluetooth |

## Multilayer Chip Varistor : AVRF041A150MT242

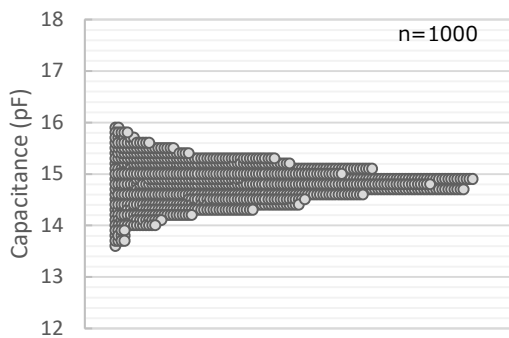
**Insertion Loss**



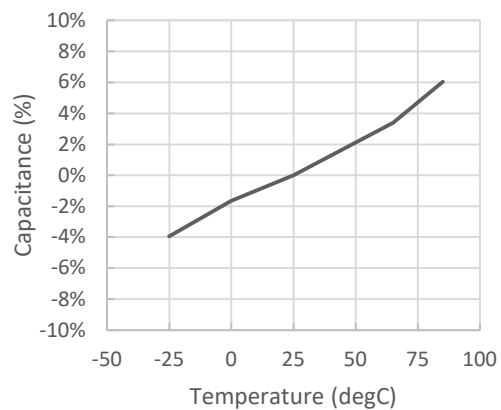
**Capacitance - Freq.**



**Capacitance Dispersion**

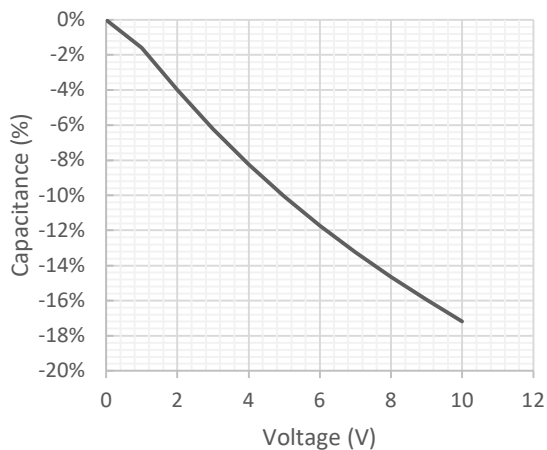


**Capacitance - Temp.** ※1MHz, 1Vrms

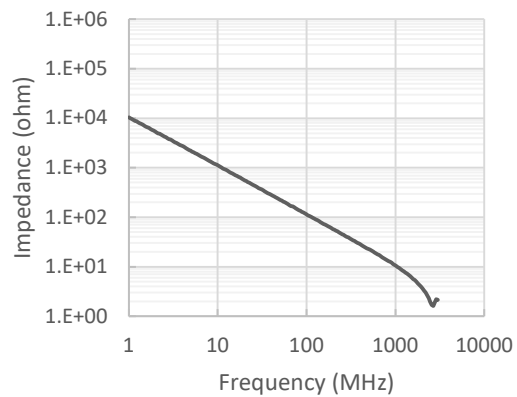


**DC bias**

※1MHz, 1Vrms

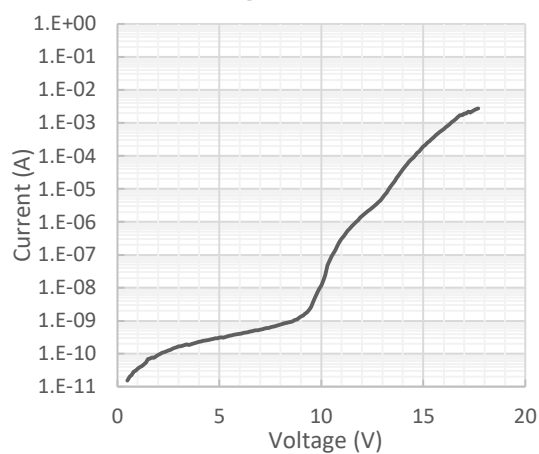


**Impedance - Freq.**

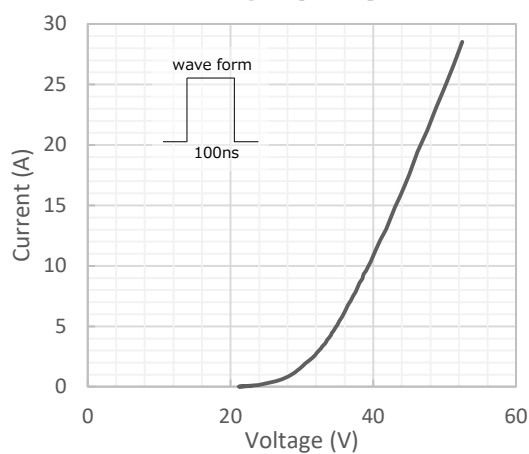


## Multilayer Chip Varistor : AVR041A150MT242

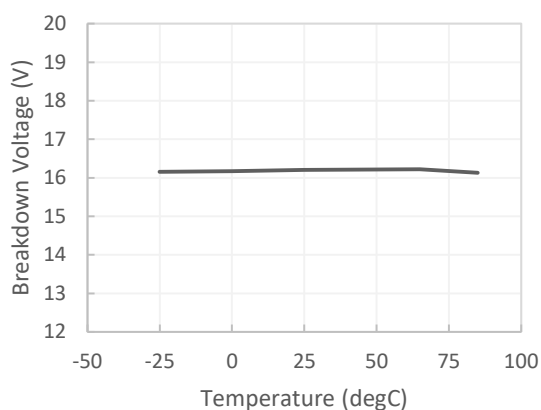
**Current - Voltage**



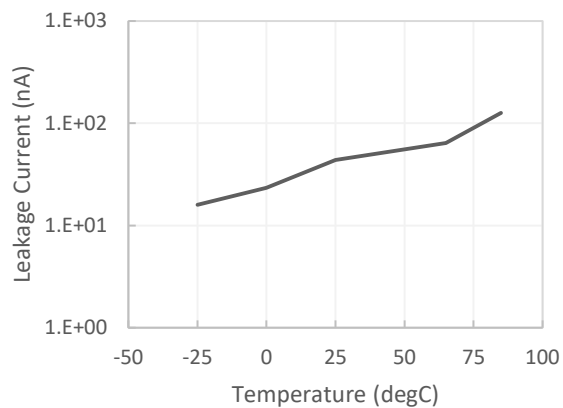
**Current - Voltage (TLP)**



**Breakdown Voltage - Temp.**



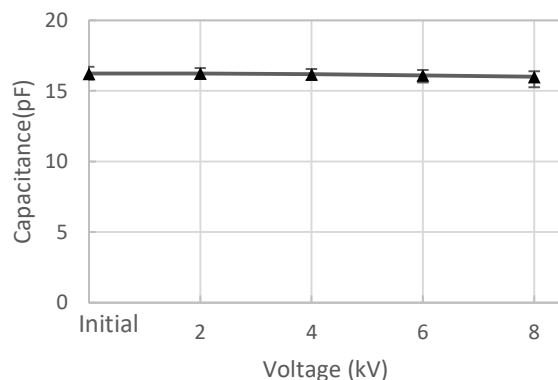
**Leakage current - Temp.**



※ Voltage : 10 V

### ESD Discharge

▶ 150pF/330ohm, ~±8kV, 10times



※Criteria : Capacitance  $\leq$  20 pF