

## SMD Varistors

### MLV; Standard Series



#### Construction

- Multilayer technology
- Termination: nickel barrier (CT series) or silver palladium (CN series) or silver platinum (only for CN0402 ... K2)
- No plastic or epoxy encapsulation assures better than UL 94 V-0 flammability rating

#### Features

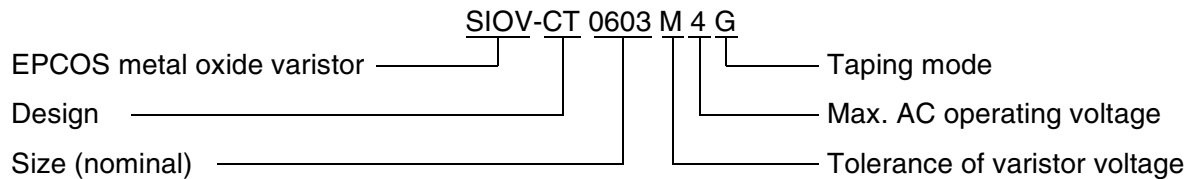
- Sizes 0402 ... 2220
- Surge currents up to 1200 A
- Operating temperatures up to 125 °C
- Good solderability
- Suitable for ESD protection
- Bidirectional clamping
- Types with controlled capacitance available
- PSpice models

#### Taping

- Supply on 8/12-mm tape, for tape dimensions see pages 154/155, for reel dimensions and packing units see page 157, chapter "SMD Varistors: Taping"

#### Type designation

Detailed description of coding system on page 39, chapter "General Technical Information"



#### General technical data

|                                            |                               |                                             |
|--------------------------------------------|-------------------------------|---------------------------------------------|
| Climatic category                          | 55/125/56 (55/85/56)          | in acc. with IEC 60068-1                    |
| LCT                                        | – 55 °C                       |                                             |
| UCT                                        | + 85 °C (CT/CN0402 ... 0603)  |                                             |
| Damp heat, steady state (93 % r.h., 40 °C) | + 125 °C (CT/CN0805 ... 2220) | in acc. with IEC 60068-2-3                  |
| Operating temperature                      | – 55 ... + 85 °C              | CT/CN0402 ... 0603 in acc. with CECC 42 000 |
|                                            | – 55 ... + 125 °C             | CT/CN0805 ... 2220 in acc. with CECC 42 000 |
| Storage temperature <sup>1)</sup>          | – 55 ... + 150 °C             | CT/CN0805 ... 2220                          |
|                                            | – 55 ... + 125 °C             | CT/CN0402 ... 0603                          |
| Response time                              | < 0,5 ns                      |                                             |
| Solderability                              | 235 °C, 2 s                   | in acc. with IEC 60068-2-58                 |
| Resistance to soldering heat               | 260 °C, 10 s                  | in acc. with IEC 60068-2-58                 |

1) For mounted parts (storage conditions for unused parts on reel see page 38, chapter "General Technical Information")



## SMD Varistors

Standard – Nickel Barrier Termination (available upon request)

**Maximum ratings** (0402 ... 0603:  $T_A = 85\text{ °C}$ ; 0805 ... 2220:  $T_A = 125\text{ °C}$ )

| Type        | Ordering code   | $V_{RMS}$ | $V_{DC}$ | $i_{max}$<br>8/20 $\mu s$ | $W_{max}$<br>(2 ms) | $P_{max}$ |
|-------------|-----------------|-----------|----------|---------------------------|---------------------|-----------|
| SIOV-       |                 | V         | V        | A                         | J                   | W         |
| CT0603M4G   | B72500T0040M060 | 4         | 5,5      | 30                        | 0,1                 | 0,003     |
| CT0805M4G   | B72510T0040M062 | 4         | 5,5      | 100                       | 0,1                 | 0,005     |
| CT1206M4G   | B72520T0040M062 | 4         | 5,5      | 150                       | 0,3                 | 0,008     |
| CT1210M4G   | B72530T0040M062 | 4         | 5,5      | 250                       | 0,4                 | 0,010     |
| CT1812M4G   | B72580T0040M062 | 4         | 5,5      | 500                       | 0,8                 | 0,015     |
| CT2220M4G   | B72540T0040M062 | 4         | 5,5      | 1000                      | 1,4                 | 0,020     |
| CT0603M6G   | B72500T0060M060 | 6         | 8        | 30                        | 0,1                 | 0,003     |
| CT0805M6G   | B72510T0060M062 | 6         | 8        | 120                       | 0,2                 | 0,005     |
| CT0805M6CCG | B72510T5060M062 | 6         | 8        | 120                       | 0,2                 | 0,005     |
| CT1206M6G   | B72520T0060M062 | 6         | 8        | 200                       | 0,4                 | 0,008     |
| CT1210M6G   | B72530T0060M062 | 6         | 8        | 300                       | 0,7                 | 0,010     |
| CT1812M6G   | B72580T0060M062 | 6         | 8        | 500                       | 1,0                 | 0,015     |
| CT2220M6G   | B72540T0060M062 | 6         | 8        | 1200                      | 3,6                 | 0,020     |
| CT0603M7G   | B72500T0070M060 | 7         | 9        | 30                        | 0,1                 | 0,003     |
| CT0603L8G   | B72500T0080L060 | 8         | 11       | 30                        | 0,1                 | 0,003     |
| CT0805L8G   | B72510T0080L062 | 8         | 11       | 120                       | 0,2                 | 0,005     |
| CT1206L8G   | B72520T0080L062 | 8         | 11       | 200                       | 0,5                 | 0,008     |
| CT1210L8G   | B72530T0080L062 | 8         | 11       | 400                       | 1,0                 | 0,010     |
| CT1812L8G   | B72580T0080L062 | 8         | 11       | 800                       | 1,8                 | 0,015     |
| CT2220L8G   | B72540T0080L062 | 8         | 11       | 1200                      | 4,2                 | 0,020     |
| CT0603K11G  | B72500T0110K060 | 11        | 14       | 30                        | 0,2                 | 0,003     |
| CT0805K11G  | B72510T0110K062 | 11        | 14       | 120                       | 0,2                 | 0,005     |
| CT1206K11G  | B72520T0110K062 | 11        | 14       | 200                       | 0,5                 | 0,008     |
| CT1210K11G  | B72530T0110K062 | 11        | 14       | 400                       | 1,2                 | 0,010     |
| CT1812K11G  | B72580T0110K062 | 11        | 14       | 800                       | 1,9                 | 0,015     |
| CT2220K11G  | B72540T0110K062 | 11        | 14       | 1200                      | 5,4                 | 0,020     |
| CT0402L14G  | B72590T0140L060 | 14        | 16       | 10                        | 0,01                | 0,003     |
| CT0603K14G  | B72500T0140K060 | 14        | 18       | 30                        | 0,2                 | 0,003     |
| CT0805K14G  | B72510T0140K062 | 14        | 18       | 120                       | 0,3                 | 0,005     |
| CT1206K14G  | B72520T0140K062 | 14        | 18       | 200                       | 0,5                 | 0,008     |
| CT1210K14G  | B72530T0140K062 | 14        | 18       | 400                       | 1,5                 | 0,010     |
| CT1812K14G  | B72580T0140K062 | 14        | 18       | 800                       | 2,3                 | 0,015     |
| CT2220K14G  | B72540T0140K062 | 14        | 18       | 1200                      | 5,8                 | 0,020     |

A wide range of HC, CC and LC types are available upon request (see 3.3.6, chapter "Applications").


**Characteristics** ( $T_A = 25\text{ °C}$ )

| Type        | $V_V$<br>(1 mA)<br>V | $\Delta V_V$<br>(1 mA)<br>% | Max. clamping voltage |          | $C_{typ}$<br>(1 kHz)<br>pF | $L_{typ}$<br>nH | Derating<br>curve<br>Page | V/I char-<br>acteristic<br>Page |
|-------------|----------------------|-----------------------------|-----------------------|----------|----------------------------|-----------------|---------------------------|---------------------------------|
|             |                      |                             | $v$<br>V              | $i$<br>A |                            |                 |                           |                                 |
| SIOV-       |                      |                             |                       |          |                            |                 |                           |                                 |
| CT0603M4G   | 8                    | ± 20                        | 19                    | 1,0      | 200                        | 1,0             | 238                       | 266                             |
| CT0805M4G   | 8                    | ± 20                        | 19                    | 1,0      | 700                        | 1,5             | 238                       | 267                             |
| CT1206M4G   | 8                    | ± 20                        | 17                    | 1,0      | 1500                       | 1,8             | 240                       | 268                             |
| CT1210M4G   | 8                    | ± 20                        | 17                    | 2,5      | 5000                       | 1,8             | 241                       | 269                             |
| CT1812M4G   | 8                    | ± 20                        | 17                    | 5,0      | 10000                      | 2,5             | 242                       | 270                             |
| CT2220M4G   | 8                    | ± 20                        | 17                    | 10,0     | 24000                      | 3,0             | 245                       | 271                             |
| CT0603M6G   | 11                   | ± 20                        | 27                    | 1,0      | 200                        | 1,0             | 238                       | 266                             |
| CT0805M6G   | 11                   | ± 20                        | 27                    | 1,0      | 600                        | 1,5             | 239                       | 267                             |
| CT0805M6CCG | 11                   | ± 20                        | 27                    | 1,0      | 1500 <sup>1)</sup>         | 1,5             | 239                       | 267                             |
| CT1206M6G   | 11                   | ± 20                        | 25                    | 1,0      | 1200                       | 1,8             | 240                       | 268                             |
| CT1210M6G   | 11                   | ± 20                        | 25                    | 2,5      | 4000                       | 1,8             | 241                       | 269                             |
| CT1812M6G   | 11                   | ± 20                        | 25                    | 5,0      | 8000                       | 2,5             | 242                       | 270                             |
| CT2220M6G   | 11                   | ± 20                        | 25                    | 10,0     | 20000                      | 3,0             | 245                       | 271                             |
| CT0603M7G   | 12,5                 | ± 20                        | 30                    | 1,0      | 200                        | 1,0             | 238                       | 266                             |
| CT0603L8G   | 15                   | ± 15                        | 33                    | 1,0      | 150                        | 1,0             | 238                       | 266                             |
| CT0805L8G   | 15                   | ± 15                        | 33                    | 1,0      | 500                        | 1,5             | 239                       | 267                             |
| CT1206L8G   | 15                   | ± 15                        | 30                    | 1,0      | 1000                       | 1,8             | 240                       | 268                             |
| CT1210L8G   | 15                   | ± 15                        | 30                    | 2,5      | 3000                       | 1,8             | 242                       | 269                             |
| CT1812L8G   | 15                   | ± 15                        | 30                    | 5,0      | 6000                       | 2,5             | 244                       | 270                             |
| CT2220L8G   | 15                   | ± 15                        | 30                    | 10,0     | 16000                      | 3,0             | 245                       | 271                             |
| CT0603K11G  | 18                   | ± 10                        | 35                    | 1,0      | 100                        | 1,0             | 238                       | 266                             |
| CT0805K11G  | 18                   | ± 10                        | 35                    | 1,0      | 400                        | 1,5             | 239                       | 267                             |
| CT1206K11G  | 18                   | ± 10                        | 33                    | 1,0      | 800                        | 1,8             | 240                       | 268                             |
| CT1210K11G  | 18                   | ± 10                        | 33                    | 2,5      | 2400                       | 1,8             | 242                       | 269                             |
| CT1812K11G  | 18                   | ± 10                        | 33                    | 5,0      | 5000                       | 2,5             | 244                       | 270                             |
| CT2220K11G  | 18                   | ± 10                        | 33                    | 10,0     | 12000                      | 3,0             | 245                       | 271                             |
| CT0402L14G  | 23,5                 | ± 15                        | 46                    | 1,0      | 60 <sup>2)</sup>           | 0,8             | 237                       | 265                             |
| CT0603K14G  | 22                   | ± 10                        | 40                    | 1,0      | 100                        | 1,0             | 238                       | 266                             |
| CT0805K14G  | 22                   | ± 10                        | 40                    | 1,0      | 350                        | 1,5             | 239                       | 267                             |
| CT1206K14G  | 22                   | ± 10                        | 38                    | 1,0      | 700                        | 1,8             | 240                       | 268                             |
| CT1210K14G  | 22                   | ± 10                        | 38                    | 2,5      | 2000                       | 1,8             | 242                       | 269                             |
| CT1812K14G  | 22                   | ± 10                        | 38                    | 5,0      | 4500                       | 2,5             | 244                       | 270                             |
| CT2220K14G  | 22                   | ± 10                        | 38                    | 10,0     | 10000                      | 3,0             | 245                       | 271                             |

1)  $C$  (1 MHz); ± 20%;    2)  $C_{typ}$  (1 MHz)

A wide range of HC, CC and LC types are available upon request (see 3.3.6, chapter "Applications").



## SMD Varistors

Standard – Nickel Barrier Termination (available upon request)

**Maximum ratings** (0402 ... 0603:  $T_A = 85\text{ °C}$ ; 0805 ... 2220:  $T_A = 125\text{ °C}$ )

| Type         | Ordering code   | $V_{RMS}$ | $V_{DC}$ | $i_{max}$<br>8/20 $\mu s$ | $W_{max}$<br>(2 ms) | $P_{max}$ |
|--------------|-----------------|-----------|----------|---------------------------|---------------------|-----------|
| SIOV-        |                 | V         | V        | A                         | J                   | W         |
| CT0603K17G   | B72500T0170K060 | 17        | 22       | 30                        | 0,2                 | 0,003     |
| CT0603K17LCG | B72500T2170K060 | 17        | 22       | 10                        | 0,1                 | 0,001     |
| CT0805K17G   | B72510T0170K062 | 17        | 22       | 120                       | 0,3                 | 0,005     |
| CT0805K17LCG | B72510T2170K062 | 17        | 22       | 30                        | 0,1                 | 0,004     |
| CT1206K17G   | B72520T0170K062 | 17        | 22       | 200                       | 0,6                 | 0,008     |
| CT1210K17G   | B72530T0170K062 | 17        | 22       | 400                       | 1,7                 | 0,010     |
| CT1812K17G   | B72580T0170K062 | 17        | 22       | 800                       | 2,7                 | 0,015     |
| CT2220K17G   | B72540T0170K062 | 17        | 22       | 1200                      | 7,2                 | 0,020     |
| CT0603K20G   | B72500T0200K060 | 20        | 26       | 30                        | 0,2                 | 0,003     |
| CT0805K20G   | B72510T0200K062 | 20        | 26       | 80                        | 0,3                 | 0,005     |
| CT1206K20G   | B72520T0200K062 | 20        | 26       | 200                       | 0,7                 | 0,008     |
| CT1210K20G   | B72530T0200K062 | 20        | 26       | 400                       | 1,9                 | 0,010     |
| CT1812K20G   | B72580T0200K062 | 20        | 26       | 800                       | 3,0                 | 0,015     |
| CT2220K20G   | B72540T0200K062 | 20        | 26       | 1200                      | 7,8                 | 0,020     |
| CT0603K25G   | B72500T0250K060 | 25        | 31       | 30                        | 0,3                 | 0,003     |
| CT0805K25G   | B72510T0250K062 | 25        | 31       | 80                        | 0,3                 | 0,005     |
| CT1206K25G   | B72520T0250K062 | 25        | 31       | 200                       | 1,0                 | 0,008     |
| CT1210K25G   | B72530T0250K062 | 25        | 31       | 300                       | 1,7                 | 0,010     |
| CT1812K25G   | B72580T0250K062 | 25        | 31       | 800                       | 3,7                 | 0,015     |
| CT2220K25G   | B72540T0250K062 | 25        | 31       | 1200                      | 9,6                 | 0,020     |
| CT0805K30G   | B72510T0300K062 | 30        | 38       | 80                        | 0,3                 | 0,005     |
| CT1206K30G   | B72520T0300K062 | 30        | 38       | 200                       | 1,1                 | 0,008     |
| CT1210K30G   | B72530T0300K062 | 30        | 38       | 300                       | 2,0                 | 0,010     |
| CT1812K30G   | B72580T0300K062 | 30        | 38       | 800                       | 4,2                 | 0,015     |
| CT2220K30G   | B72540T0300K062 | 30        | 38       | 1200                      | 12,0                | 0,020     |
| CT1206K35G   | B72520T0350K062 | 35        | 45       | 100                       | 0,4                 | 0,008     |
| CT1210K35G   | B72530T0350K062 | 35        | 45       | 250                       | 2,0                 | 0,010     |
| CT1812K35G   | B72580T0350K062 | 35        | 45       | 500                       | 4,0                 | 0,015     |
| CT2220K35G   | B72540T0350K062 | 35        | 45       | 1000                      | 7,7                 | 0,020     |
| CT1206K40G   | B72520T0400K062 | 40        | 56       | 100                       | 0,5                 | 0,008     |
| CT1210K40G   | B72530T0400K062 | 40        | 56       | 250                       | 2,3                 | 0,010     |
| CT1812K40G   | B72580T0400K062 | 40        | 56       | 500                       | 4,8                 | 0,015     |
| CT2220K40G   | B72540T0400K062 | 40        | 56       | 1000                      | 9,0                 | 0,020     |

A wide range of HC, CC and LC types are available upon request (see 3.3.6, chapter "Applications").


**Characteristics** ( $T_A = 25\text{ °C}$ )

| Type         | $V_V$<br>(1 mA)<br>V | $\Delta V_V$<br>(1 mA)<br>% | Max. clamping voltage |          | $C_{typ}$<br>(1 kHz)<br>pF | $L_{typ}$<br>nH | Derating<br>curve<br>Page | V/I char-<br>acteristic<br>Page |
|--------------|----------------------|-----------------------------|-----------------------|----------|----------------------------|-----------------|---------------------------|---------------------------------|
|              |                      |                             | $v$<br>V              | $i$<br>A |                            |                 |                           |                                 |
| SIOV-        |                      |                             |                       |          |                            |                 |                           |                                 |
| CT0603K17G   | 27                   | $\pm 10$                    | 46                    | 1,0      | 100                        | 1,0             | 238                       | 266                             |
| CT0603K17LCG | 27                   | $\pm 10$                    | 50                    | 1,0      | < 50                       | 1,0             | 237                       | 266                             |
| CT0805K17G   | 27                   | $\pm 10$                    | 46                    | 1,0      | 400                        | 1,5             | 239                       | 267                             |
| CT0805K17LCG | 27                   | +22/–8 <sup>1)</sup>        | 50                    | 1,0      | < 100                      | 1,0             | 238                       | 267                             |
| CT1206K17G   | 27                   | $\pm 10$                    | 44                    | 1,0      | 650                        | 1,8             | 240                       | 268                             |
| CT1210K17G   | 27                   | $\pm 10$                    | 44                    | 2,5      | 1800                       | 1,8             | 242                       | 269                             |
| CT1812K17G   | 27                   | $\pm 10$                    | 44                    | 5,0      | 4000                       | 2,5             | 244                       | 270                             |
| CT2220K17G   | 27                   | $\pm 10$                    | 44                    | 10,0     | 9000                       | 3,0             | 245                       | 271                             |
| CT0603K20G   | 33                   | $\pm 10$                    | 56                    | 1,0      | 90                         | 1,0             | 238                       | 266                             |
| CT0805K20G   | 33                   | $\pm 10$                    | 56                    | 1,0      | 300                        | 1,5             | 239                       | 267                             |
| CT1206K20G   | 33                   | $\pm 10$                    | 54                    | 1,0      | 600                        | 1,8             | 240                       | 268                             |
| CT1210K20G   | 33                   | $\pm 10$                    | 54                    | 2,5      | 1500                       | 1,8             | 242                       | 269                             |
| CT1812K20G   | 33                   | $\pm 10$                    | 54                    | 5,0      | 3000                       | 2,5             | 244                       | 270                             |
| CT2220K20G   | 33                   | $\pm 10$                    | 54                    | 10,0     | 7000                       | 3,0             | 245                       | 271                             |
| CT0603K25G   | 39                   | $\pm 10$                    | 67                    | 1,0      | 90 <sup>2)</sup>           | 1,0             | 238                       | 266                             |
| CT0805K25G   | 39                   | $\pm 10$                    | 67                    | 1,0      | 250                        | 1,5             | 239                       | 267                             |
| CT1206K25G   | 39                   | $\pm 10$                    | 65                    | 1,0      | 550                        | 1,8             | 240                       | 268                             |
| CT1210K25G   | 39                   | $\pm 10$                    | 65                    | 2,5      | 1200                       | 1,8             | 241                       | 269                             |
| CT1812K25G   | 39                   | $\pm 10$                    | 65                    | 5,0      | 2500                       | 2,5             | 244                       | 270                             |
| CT2220K25G   | 39                   | $\pm 10$                    | 65                    | 10,0     | 5000                       | 3,0             | 245                       | 271                             |
| CT0805K30G   | 47                   | $\pm 10$                    | 77                    | 1,0      | 200                        | 1,0             | 239                       | 267                             |
| CT1206K30G   | 47                   | $\pm 10$                    | 77                    | 1,0      | 500                        | 1,8             | 240                       | 268                             |
| CT1210K30G   | 47                   | $\pm 10$                    | 77                    | 2,5      | 1000                       | 1,8             | 241                       | 269                             |
| CT1812K30G   | 47                   | $\pm 10$                    | 77                    | 5,0      | 2000                       | 2,5             | 244                       | 270                             |
| CT2220K30G   | 47                   | $\pm 10$                    | 77                    | 10,0     | 4000                       | 3,0             | 245                       | 271                             |
| CT1206K35G   | 56                   | $\pm 10$                    | 90                    | 1,0      | 200                        | 1,8             | 238                       | 268                             |
| CT1210K35G   | 56                   | $\pm 10$                    | 90                    | 2,5      | 600                        | 1,8             | 241                       | 269                             |
| CT1812K35G   | 56                   | $\pm 10$                    | 90                    | 5,0      | 1200                       | 2,5             | 242                       | 270                             |
| CT2220K35G   | 56                   | $\pm 10$                    | 90                    | 10,0     | 2500                       | 3,0             | 245                       | 271                             |
| CT1206K40G   | 68                   | $\pm 10$                    | 110                   | 1,0      | 250                        | 1,8             | 238                       | 268                             |
| CT1210K40G   | 68                   | $\pm 10$                    | 110                   | 2,5      | 500                        | 1,8             | 241                       | 269                             |
| CT1812K40G   | 68                   | $\pm 10$                    | 110                   | 5,0      | 1000                       | 2,5             | 242                       | 270                             |
| CT2220K40G   | 68                   | $\pm 10$                    | 110                   | 10,0     | 2000                       | 3,0             | 245                       | 271                             |

1) Tolerance differs from standard; 2)  $C_{typ}$  (1 MHz)

A wide range of HC, CC and LC types are available upon request (see 3.3.6, chapter “Applications”).



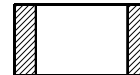
## SMD Varistors

Standard – Nickel Barrier Termination (available upon request)

**Maximum ratings** (0402 ... 0603:  $T_A = 85\text{ °C}$ ; 0805 ... 2220:  $T_A = 125\text{ °C}$ )

| Type       | Ordering code   | $V_{\text{RMS}}$ | $V_{\text{DC}}$ | $i_{\text{max}}$<br>8/20 $\mu\text{s}$ | $W_{\text{max}}$<br>(2 ms) | $P_{\text{max}}$ |
|------------|-----------------|------------------|-----------------|----------------------------------------|----------------------------|------------------|
| SIOV-      |                 | V                | V               | A                                      | J                          | W                |
| CT1206K50G | B72520T0500K062 | 50               | 65              | 100                                    | 0,6                        | 0,008            |
| CT1210K50G | B72530T0500K062 | 50               | 65              | 200                                    | 1,6                        | 0,010            |
| CT1812K50G | B72580T0500K062 | 50               | 65              | 400                                    | 4,5                        | 0,015            |
| CT2220K50G | B72540T0500K062 | 50               | 65              | 800                                    | 5,6                        | 0,020            |
| CT1206K60G | B72520T0600K062 | 60               | 85              | 100                                    | 0,7                        | 0,008            |
| CT1210K60G | B72530T0600K062 | 60               | 85              | 200                                    | 2,0                        | 0,010            |
| CT1812K60G | B72580T0600K062 | 60               | 85              | 400                                    | 5,8                        | 0,015            |
| CT2220K60G | B72540T0600K062 | 60               | 85              | 800                                    | 6,8                        | 0,020            |

A wide range of HC, CC and LC types are available upon request (see 3.3.6, chapter “Applications”).


**Characteristics** ( $T_A = 25\text{ °C}$ )

| Type       | $V_V$<br>(1 mA)<br>V | $\Delta V_V$<br>(1 mA)<br>% | Max. clamping voltage |          | $C_{typ}$<br>(1 kHz)<br>pF | $L_{typ}$<br>nH | Derating<br>curve<br>Page | V/I char-<br>acteristic<br>Page |
|------------|----------------------|-----------------------------|-----------------------|----------|----------------------------|-----------------|---------------------------|---------------------------------|
|            |                      |                             | $v$<br>V              | $i$<br>A |                            |                 |                           |                                 |
| SIOV-      |                      |                             |                       |          |                            |                 |                           |                                 |
| CT1206K50G | 82                   | $\pm 10$                    | 135                   | 1,0      | 120                        | 1,8             | 238                       | 268                             |
| CT1210K50G | 82                   | $\pm 10$                    | 135                   | 2,5      | 250                        | 1,8             | 240                       | 269                             |
| CT1812K50G | 82                   | $\pm 10$                    | 135                   | 5,0      | 500                        | 2,5             | 242                       | 270                             |
| CT2220K50G | 82                   | $\pm 10$                    | 135                   | 10,0     | 1000                       | 3,0             | 244                       | 271                             |
| CT1206K60G | 100                  | $\pm 10$                    | 165                   | 1,0      | 100                        | 1,8             | 238                       | 268                             |
| CT1210K60G | 100                  | $\pm 10$                    | 165                   | 2,5      | 200                        | 1,8             | 240                       | 269                             |
| CT1812K60G | 100                  | $\pm 10$                    | 165                   | 5,0      | 400                        | 2,5             | 242                       | 270                             |
| CT2220K60G | 100                  | $\pm 10$                    | 165                   | 10,0     | 800                        | 3,0             | 244                       | 271                             |

A wide range of HC, CC and LC types are available upon request (see 3.3.6, chapter “Applications”).





## SMD Varistors

### Standard – Silver Palladium Termination (0402: Silver Platinum)

**Maximum ratings** (0402 ... 0603:  $T_A = 85\text{ °C}$ ; 0805 ... 2220:  $T_A = 125\text{ °C}$ )

| Type         | Ordering code   | $V_{RMS}$ | $V_{DC}$ | $i_{max}$<br>8/20 $\mu s$ | $W_{max}$<br>(2 ms) | $P_{max}$ |
|--------------|-----------------|-----------|----------|---------------------------|---------------------|-----------|
| SIOV-        |                 | V         | V        | A                         | J                   | W         |
| CN0603M4G    | B72500V0040M060 | 4         | 5,5      | 30                        | 0,1                 | 0,003     |
| CN0805M4G    | B72510V0040M062 | 4         | 5,5      | 100                       | 0,1                 | 0,005     |
| CN1206M4G    | B72520V0040M062 | 4         | 5,5      | 150                       | 0,3                 | 0,008     |
| CN1210M4G    | B72530V0040M062 | 4         | 5,5      | 250                       | 0,4                 | 0,010     |
| CN1812M4G    | B72580V0040M062 | 4         | 5,5      | 500                       | 0,8                 | 0,015     |
| CN2220M4G    | B72540V0040M062 | 4         | 5,5      | 1000                      | 1,4                 | 0,020     |
| CN0603M6G    | B72500V0060M060 | 6         | 8        | 30                        | 0,1                 | 0,003     |
| CN0805M6G    | B72510V0060M062 | 6         | 8        | 120                       | 0,2                 | 0,005     |
| CN0805M6CCG  | B72510V5060M062 | 6         | 8        | 120                       | 0,2                 | 0,005     |
| CN1206M6G    | B72520V0060M062 | 6         | 8        | 200                       | 0,4                 | 0,008     |
| CN1210M6G    | B72530V0060M062 | 6         | 8        | 300                       | 0,7                 | 0,010     |
| CN1812M6G    | B72580V0060M062 | 6         | 8        | 500                       | 1,0                 | 0,015     |
| CN2220M6G    | B72540V0060M062 | 6         | 8        | 1200                      | 3,6                 | 0,020     |
| CN0603M7G    | B72500V0070M060 | 7         | 9        | 30                        | 0,1                 | 0,003     |
| CN0603L8G    | B72500V0080L060 | 8         | 11       | 30                        | 0,1                 | 0,003     |
| CN0805L8G    | B72510V0080L062 | 8         | 11       | 120                       | 0,2                 | 0,005     |
| CN1206L8G    | B72520V0080L062 | 8         | 11       | 200                       | 0,5                 | 0,008     |
| CN1210L8G    | B72530V0080L062 | 8         | 11       | 400                       | 1,0                 | 0,010     |
| CN1812L8G    | B72580V0080L062 | 8         | 11       | 800                       | 1,8                 | 0,015     |
| CN2220L8G    | B72540V0080L062 | 8         | 11       | 1200                      | 4,2                 | 0,020     |
| CN0603K11G   | B72500V0110K060 | 11        | 14       | 30                        | 0,2                 | 0,003     |
| CN0805K11G   | B72510V0110K062 | 11        | 14       | 120                       | 0,2                 | 0,005     |
| CN1206K11G   | B72520V0110K062 | 11        | 14       | 200                       | 0,5                 | 0,008     |
| CN1210K11G   | B72530V0110K062 | 11        | 14       | 400                       | 1,2                 | 0,010     |
| CN1812K11G   | B72580V0110K062 | 11        | 14       | 800                       | 1,9                 | 0,015     |
| CN2220K11G   | B72540V0110K062 | 11        | 14       | 1200                      | 5,4                 | 0,020     |
| CN0402L14GK2 | B72592V0140L060 | 14        | 16       | 10                        | 0,01                | 0,003     |
| CN0603K14G   | B72500V0140K060 | 14        | 18       | 30                        | 0,2                 | 0,003     |
| CN0805K14G   | B72510V0140K062 | 14        | 18       | 120                       | 0,3                 | 0,005     |
| CN1206K14G   | B72520V0140K062 | 14        | 18       | 200                       | 0,5                 | 0,008     |
| CN1210K14G   | B72530V0140K062 | 14        | 18       | 400                       | 1,5                 | 0,010     |
| CN1812K14G   | B72580V0140K062 | 14        | 18       | 800                       | 2,3                 | 0,015     |
| CN2220K14G   | B72540V0140K062 | 14        | 18       | 1200                      | 5,8                 | 0,020     |

A wide range of HC, CC and LC types are available upon request (see 3.3.6, chapter "Applications").


**Characteristics** ( $T_A = 25\text{ °C}$ )

| Type         | $V_V$<br>(1 mA)<br>V | $\Delta V_V$<br>(1 mA)<br>% | Max. clamping voltage |          | $C_{typ}$<br>(1 kHz)<br>pF | $L_{typ}$<br>nH | Derating<br>curve<br>Page | V/I char-<br>acteristic<br>Page |
|--------------|----------------------|-----------------------------|-----------------------|----------|----------------------------|-----------------|---------------------------|---------------------------------|
|              |                      |                             | $v$<br>V              | $i$<br>A |                            |                 |                           |                                 |
| SIOV-        |                      |                             |                       |          |                            |                 |                           |                                 |
| CN0603M4G    | 8                    | ± 20                        | 19                    | 1,0      | 200                        | 1,0             | 238                       | 266                             |
| CN0805M4G    | 8                    | ± 20                        | 19                    | 1,0      | 700                        | 1,5             | 238                       | 267                             |
| CN1206M4G    | 8                    | ± 20                        | 17                    | 1,0      | 1500                       | 1,8             | 240                       | 268                             |
| CN1210M4G    | 8                    | ± 20                        | 17                    | 2,5      | 5000                       | 1,8             | 241                       | 269                             |
| CN1812M4G    | 8                    | ± 20                        | 17                    | 5,0      | 10000                      | 2,5             | 242                       | 270                             |
| CN2220M4G    | 8                    | ± 20                        | 17                    | 10,0     | 24000                      | 3,0             | 245                       | 271                             |
| CN0603M6G    | 11                   | ± 20                        | 27                    | 1,0      | 200                        | 1,0             | 238                       | 266                             |
| CN0805M6G    | 11                   | ± 20                        | 27                    | 1,0      | 600                        | 1,5             | 239                       | 267                             |
| CN0805M6CCG  | 11                   | ± 20                        | 27                    | 1,0      | 1500 <sup>1)</sup>         | 1,5             | 239                       | 267                             |
| CN1206M6G    | 11                   | ± 20                        | 25                    | 1,0      | 1200                       | 1,8             | 240                       | 268                             |
| CN1210M6G    | 11                   | ± 20                        | 25                    | 2,5      | 4000                       | 1,8             | 241                       | 269                             |
| CN1812M6G    | 11                   | ± 20                        | 25                    | 5,0      | 8000                       | 2,5             | 242                       | 270                             |
| CN2220M6G    | 11                   | ± 20                        | 25                    | 10,0     | 20000                      | 3,0             | 245                       | 271                             |
| CN0603M7G    | 12,5                 | ± 20                        | 30                    | 1,0      | 200                        | 1,0             | 238                       | 266                             |
| CN0603L8G    | 15                   | ± 15                        | 33                    | 1,0      | 150                        | 1,0             | 238                       | 266                             |
| CN0805L8G    | 15                   | ± 15                        | 33                    | 1,0      | 500                        | 1,5             | 239                       | 267                             |
| CN1206L8G    | 15                   | ± 15                        | 30                    | 1,0      | 1000                       | 1,8             | 240                       | 268                             |
| CN1210L8G    | 15                   | ± 15                        | 30                    | 2,5      | 3000                       | 1,8             | 242                       | 269                             |
| CN1812L8G    | 15                   | ± 15                        | 30                    | 5,0      | 6000                       | 2,5             | 244                       | 270                             |
| CN2220L8G    | 15                   | ± 15                        | 30                    | 10,0     | 16000                      | 3,0             | 245                       | 271                             |
| CN0603K11G   | 18                   | ± 10                        | 35                    | 1,0      | 100                        | 1,0             | 238                       | 266                             |
| CN0805K11G   | 18                   | ± 10                        | 35                    | 1,0      | 400                        | 1,5             | 239                       | 267                             |
| CN1206K11G   | 18                   | ± 10                        | 33                    | 1,0      | 800                        | 1,8             | 240                       | 268                             |
| CN1210K11G   | 18                   | ± 10                        | 33                    | 2,5      | 2400                       | 1,8             | 242                       | 269                             |
| CN1812K11G   | 18                   | ± 10                        | 33                    | 5,0      | 5000                       | 2,5             | 244                       | 270                             |
| CN2220K11G   | 18                   | ± 10                        | 33                    | 10,0     | 12000                      | 3,0             | 245                       | 271                             |
| CN0402L14GK2 | 23,5                 | ± 15                        | 46                    | 1,0      | 60 <sup>2)</sup>           | 0,8             | 237                       | 265                             |
| CN0603K14G   | 22                   | ± 10                        | 40                    | 1,0      | 100                        | 1,0             | 238                       | 266                             |
| CN0805K14G   | 22                   | ± 10                        | 40                    | 1,0      | 350                        | 1,5             | 239                       | 267                             |
| CN1206K14G   | 22                   | ± 10                        | 38                    | 1,0      | 700                        | 1,8             | 240                       | 268                             |
| CN1210K14G   | 22                   | ± 10                        | 38                    | 2,5      | 2000                       | 1,8             | 242                       | 269                             |
| CN1812K14G   | 22                   | ± 10                        | 38                    | 5,0      | 4500                       | 2,5             | 244                       | 270                             |
| CN2220K14G   | 22                   | ± 10                        | 38                    | 10,0     | 10000                      | 3,0             | 245                       | 271                             |

1)  $C$  (1 MHz); ± 20%;    2)  $C_{typ}$  (1 MHz)

A wide range of HC, CC and LC types are available upon request (see 3.3.6, chapter "Applications").



## SMD Varistors

### Standard – Silver Palladium Termination (0402: Silver Platinum)

**Maximum ratings** (0402 ... 0603:  $T_A = 85\text{ °C}$ ; 0805 ... 2220:  $T_A = 125\text{ °C}$ )

| Type         | Ordering code   | $V_{RMS}$ | $V_{DC}$ | $i_{max}$<br>8/20 $\mu s$ | $W_{max}$<br>(2 ms) | $P_{max}$ |
|--------------|-----------------|-----------|----------|---------------------------|---------------------|-----------|
| SIOV-        |                 | V         | V        | A                         | J                   | W         |
| CN0603K17G   | B72500V0170K060 | 17        | 22       | 30                        | 0,2                 | 0,003     |
| CN0603K17LCG | B72500V2170K060 | 17        | 22       | 10                        | 0,1                 | 0,001     |
| CN0805K17G   | B72510V0170K062 | 17        | 22       | 120                       | 0,3                 | 0,005     |
| CN0805K17LCG | B72510V2170K062 | 17        | 22       | 30                        | 0,1                 | 0,004     |
| CN1206K17G   | B72520V0170K062 | 17        | 22       | 200                       | 0,6                 | 0,008     |
| CN1210K17G   | B72530V0170K062 | 17        | 22       | 400                       | 1,7                 | 0,010     |
| CN1812K17G   | B72580V0170K062 | 17        | 22       | 800                       | 2,7                 | 0,015     |
| CN2220K17G   | B72540V0170K062 | 17        | 22       | 1200                      | 7,2                 | 0,020     |
| CN0603K20G   | B72500V0200K060 | 20        | 26       | 30                        | 0,3                 | 0,003     |
| CN0805K20G   | B72510V0200K062 | 20        | 26       | 80                        | 0,3                 | 0,005     |
| CN1206K20G   | B72520V0200K062 | 20        | 26       | 200                       | 0,7                 | 0,008     |
| CN1210K20G   | B72530V0200K062 | 20        | 26       | 400                       | 1,9                 | 0,010     |
| CN1812K20G   | B72580V0200K062 | 20        | 26       | 800                       | 3,0                 | 0,015     |
| CN2220K20G   | B72540V0200K062 | 20        | 26       | 1200                      | 7,8                 | 0,020     |
| CN0603K25G   | B72500V0250K060 | 25        | 31       | 30                        | 0,3                 | 0,003     |
| CN0805K25G   | B72510V0250K062 | 25        | 31       | 80                        | 0,3                 | 0,005     |
| CN1206K25G   | B72520V0250K062 | 25        | 31       | 200                       | 1,0                 | 0,008     |
| CN1210K25G   | B72530V0250K062 | 25        | 31       | 300                       | 1,7                 | 0,010     |
| CN1812K25G   | B72580V0250K062 | 25        | 31       | 800                       | 3,7                 | 0,015     |
| CN2220K25G   | B72540V0250K062 | 25        | 31       | 1200                      | 9,6                 | 0,020     |
| CN0805K30G   | B72510V0300K062 | 30        | 38       | 80                        | 0,3                 | 0,005     |
| CN1206K30G   | B72520V0300K062 | 30        | 38       | 200                       | 1,1                 | 0,008     |
| CN1210K30G   | B72530V0300K062 | 30        | 38       | 300                       | 2,0                 | 0,010     |
| CN1812K30G   | B72580V0300K062 | 30        | 38       | 800                       | 4,2                 | 0,015     |
| CN2220K30G   | B72540V0300K062 | 30        | 38       | 1200                      | 12,0                | 0,020     |
| CN1206K35G   | B72520V0350K062 | 35        | 45       | 100                       | 0,4                 | 0,008     |
| CN1210K35G   | B72530V0350K062 | 35        | 45       | 250                       | 2,0                 | 0,010     |
| CN1812K35G   | B72580V0350K062 | 35        | 45       | 500                       | 4,0                 | 0,015     |
| CN2220K35G   | B72540V0350K062 | 35        | 45       | 1000                      | 7,7                 | 0,020     |
| CN1206K40G   | B72520V0400K062 | 40        | 56       | 100                       | 0,5                 | 0,008     |
| CN1210K40G   | B72530V0400K062 | 40        | 56       | 250                       | 2,3                 | 0,010     |
| CN1812K40G   | B72580V0400K062 | 40        | 56       | 500                       | 4,8                 | 0,015     |
| CN2220K40G   | B72540V0400K062 | 40        | 56       | 1000                      | 9,0                 | 0,020     |

A wide range of HC, CC and LC types are available upon request (see 3.3.6, chapter "Applications").


**Characteristics** ( $T_A = 25\text{ °C}$ )

| Type         | $V_V$<br>(1 mA)<br>V | $\Delta V_V$<br>(1 mA)<br>% | Max. clamping voltage |          | $C_{typ}$<br>(1 kHz)<br>pF | $L_{typ}$<br>nH | Derating<br>curve<br>Page | V/I char-<br>acteristic<br>Page |
|--------------|----------------------|-----------------------------|-----------------------|----------|----------------------------|-----------------|---------------------------|---------------------------------|
|              |                      |                             | $v$<br>V              | $i$<br>A |                            |                 |                           |                                 |
| SIOV-        |                      |                             |                       |          |                            |                 |                           |                                 |
| CN0603K17G   | 27                   | $\pm 10$                    | 46                    | 1,0      | 100                        | 1,0             | 238                       | 266                             |
| CN0603K17LCG | 27                   | $\pm 10$                    | 50                    | 1,0      | < 50                       | 1,0             | 237                       | 266                             |
| CN0805K17G   | 27                   | $\pm 10$                    | 46                    | 1,0      | 400                        | 1,5             | 239                       | 267                             |
| CN0805K17LCG | 27                   | +22/−8 <sup>1)</sup>        | 50                    | 1,0      | < 100                      | 1,0             | 238                       | 267                             |
| CN1206K17G   | 27                   | $\pm 10$                    | 44                    | 1,0      | 650                        | 1,8             | 240                       | 268                             |
| CN1210K17G   | 27                   | $\pm 10$                    | 44                    | 2,5      | 1800                       | 1,8             | 242                       | 269                             |
| CN1812K17G   | 27                   | $\pm 10$                    | 44                    | 5,0      | 4000                       | 2,5             | 244                       | 270                             |
| CN2220K17G   | 27                   | $\pm 10$                    | 44                    | 10,0     | 9000                       | 3,0             | 245                       | 271                             |
| CN0603K20G   | 33                   | $\pm 10$                    | 56                    | 1,0      | 90                         | 1,0             | 238                       | 266                             |
| CN0805K20G   | 33                   | $\pm 10$                    | 56                    | 1,0      | 300                        | 1,5             | 239                       | 267                             |
| CN1206K20G   | 33                   | $\pm 10$                    | 54                    | 1,0      | 600                        | 1,8             | 240                       | 268                             |
| CN1210K20G   | 33                   | $\pm 10$                    | 54                    | 2,5      | 1500                       | 1,8             | 242                       | 269                             |
| CN1812K20G   | 33                   | $\pm 10$                    | 54                    | 5,0      | 3000                       | 2,5             | 244                       | 270                             |
| CN2220K20G   | 33                   | $\pm 10$                    | 54                    | 10,0     | 7000                       | 3,0             | 245                       | 271                             |
| CN0603K25G   | 39                   | $\pm 10$                    | 67                    | 1,0      | 90 <sup>2)</sup>           | 1,0             | 238                       | 266                             |
| CN0805K25G   | 39                   | $\pm 10$                    | 67                    | 1,0      | 250                        | 1,5             | 239                       | 267                             |
| CN1206K25G   | 39                   | $\pm 10$                    | 65                    | 1,0      | 550                        | 1,8             | 240                       | 268                             |
| CN1210K25G   | 39                   | $\pm 10$                    | 65                    | 2,5      | 1200                       | 1,8             | 241                       | 269                             |
| CN1812K25G   | 39                   | $\pm 10$                    | 65                    | 5,0      | 2500                       | 2,5             | 244                       | 270                             |
| CN2220K25G   | 39                   | $\pm 10$                    | 65                    | 10,0     | 5000                       | 3,0             | 245                       | 271                             |
| CN0805K30G   | 47                   | $\pm 10$                    | 77                    | 1,0      | 200                        | 1,0             | 239                       | 267                             |
| CN1206K30G   | 47                   | $\pm 10$                    | 77                    | 1,0      | 500                        | 1,8             | 240                       | 268                             |
| CN1210K30G   | 47                   | $\pm 10$                    | 77                    | 2,5      | 1000                       | 1,8             | 241                       | 269                             |
| CN1812K30G   | 47                   | $\pm 10$                    | 77                    | 5,0      | 2000                       | 2,5             | 244                       | 270                             |
| CN2220K30G   | 47                   | $\pm 10$                    | 77                    | 10,0     | 4000                       | 3,0             | 245                       | 271                             |
| CN1206K35G   | 56                   | $\pm 10$                    | 90                    | 1,0      | 200                        | 1,8             | 238                       | 268                             |
| CN1210K35G   | 56                   | $\pm 10$                    | 90                    | 2,5      | 600                        | 1,8             | 241                       | 269                             |
| CN1812K35G   | 56                   | $\pm 10$                    | 90                    | 5,0      | 1200                       | 2,5             | 242                       | 270                             |
| CN2220K35G   | 56                   | $\pm 10$                    | 90                    | 10,0     | 2500                       | 3,0             | 245                       | 271                             |
| CN1206K40G   | 68                   | $\pm 10$                    | 110                   | 1,0      | 250                        | 1,8             | 238                       | 268                             |
| CN1210K40G   | 68                   | $\pm 10$                    | 110                   | 2,5      | 500                        | 1,8             | 241                       | 269                             |
| CN1812K40G   | 68                   | $\pm 10$                    | 110                   | 5,0      | 1000                       | 2,5             | 242                       | 270                             |
| CN2220K40G   | 68                   | $\pm 10$                    | 110                   | 10,0     | 2000                       | 3,0             | 245                       | 271                             |

1) Tolerance differs from standard; 2)  $C_{typ}$  (1 MHz)

A wide range of HC, CC and LC types are available upon request (see 3.3.6, chapter “Applications”).



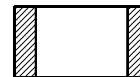
## SMD Varistors

### Standard – Silver Palladium Termination (0402: Silver Platinum)

**Maximum ratings** (0402 ... 0603:  $T_A = 85\text{ °C}$ ; 0805 ... 2220:  $T_A = 125\text{ °C}$ )

| Type       | Ordering code   | $V_{RMS}$ | $V_{DC}$ | $i_{max}$<br>8/20 $\mu s$ | $W_{max}$<br>(2 ms) | $P_{max}$ |
|------------|-----------------|-----------|----------|---------------------------|---------------------|-----------|
| SIOV-      |                 | V         | V        | A                         | J                   | W         |
| CN1206K50G | B72520V0500K062 | 50        | 65       | 100                       | 0,6                 | 0,008     |
| CN1210K50G | B72530V0500K062 | 50        | 65       | 200                       | 1,6                 | 0,010     |
| CN1812K50G | B72580V0500K062 | 50        | 65       | 400                       | 4,5                 | 0,015     |
| CN2220K50G | B72540V0500K062 | 50        | 65       | 800                       | 5,6                 | 0,020     |
| CN1206K60G | B72520V0600K062 | 60        | 85       | 100                       | 0,7                 | 0,008     |
| CN1210K60G | B72530V0600K062 | 60        | 85       | 200                       | 2,0                 | 0,010     |
| CN1812K60G | B72580V0600K062 | 60        | 85       | 400                       | 5,8                 | 0,015     |
| CN2220K60G | B72540V0600K062 | 60        | 85       | 800                       | 6,8                 | 0,020     |

A wide range of HC, CC and LC types are available upon request (see 3.3.6, chapter “Applications”).


**Characteristics** ( $T_A = 25\text{ °C}$ )

| Type       | $V_V$<br>(1 mA)<br>V | $\Delta V_V$<br>(1 mA)<br>% | Max. clamping voltage |          | $C_{typ}$<br>(1 kHz)<br>pF | $L_{typ}$<br>nH | Derating<br>curve<br>Page | V/I char-<br>acteristic<br>Page |
|------------|----------------------|-----------------------------|-----------------------|----------|----------------------------|-----------------|---------------------------|---------------------------------|
|            |                      |                             | $v$<br>V              | $i$<br>A |                            |                 |                           |                                 |
| SIOV-      |                      |                             |                       |          |                            |                 |                           |                                 |
| CN1206K50G | 82                   | $\pm 10$                    | 135                   | 1,0      | 120                        | 1,8             | 238                       | 268                             |
| CN1210K50G | 82                   | $\pm 10$                    | 135                   | 2,5      | 250                        | 1,8             | 240                       | 269                             |
| CN1812K50G | 82                   | $\pm 10$                    | 135                   | 5,0      | 500                        | 2,5             | 242                       | 270                             |
| CN2220K50G | 82                   | $\pm 10$                    | 135                   | 10,0     | 1000                       | 3,0             | 244                       | 271                             |
| CN1206K60G | 100                  | $\pm 10$                    | 165                   | 1,0      | 100                        | 1,8             | 238                       | 268                             |
| CN1210K60G | 100                  | $\pm 10$                    | 165                   | 2,5      | 200                        | 1,8             | 240                       | 269                             |
| CN1812K60G | 100                  | $\pm 10$                    | 165                   | 5,0      | 400                        | 2,5             | 242                       | 270                             |
| CN2220K60G | 100                  | $\pm 10$                    | 165                   | 10,0     | 800                        | 3,0             | 244                       | 271                             |

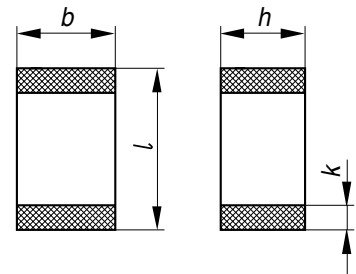
A wide range of HC, CC and LC types are available upon request (see 3.3.6, chapter “Applications”).





## SMD Varistors

### MLV; Standard Series



Weight: < 0,2 g

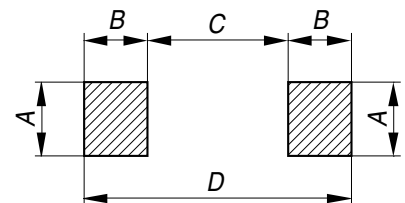
Termination acc. CECC 32101-801

VAR0406-M

### Dimensions

| Type           | $l$<br>mm      | $b$<br>mm       | $h$<br>mm | $k$<br>mm     |
|----------------|----------------|-----------------|-----------|---------------|
| SIOV-CT/CN0402 | $1,0 \pm 0,15$ | $0,50 \pm 0,10$ | 0,6 max.  | 0,1 ... 0,3   |
| SIOV-CT/CN0603 | $1,6 \pm 0,15$ | $0,80 \pm 0,10$ | 0,9 max.  | 0,1 ... 0,4   |
| SIOV-CT/CN0805 | $2,0 \pm 0,20$ | $1,25 \pm 0,15$ | 1,4 max.  | 0,13 ... 0,75 |
| SIOV-CT/CN1206 | $3,2 \pm 0,30$ | $1,60 \pm 0,20$ | 1,7 max.  | 0,25 ... 0,75 |
| SIOV-CT/CN1210 | $3,2 \pm 0,30$ | $2,50 \pm 0,25$ | 1,7 max.  | 0,25 ... 0,75 |
| SIOV-CT/CN1812 | $4,5 \pm 0,40$ | $3,20 \pm 0,30$ | 2,5 max.  | 0,25 ... 1,0  |
| SIOV-CT/CN2220 | $5,7 \pm 0,40$ | $5,00 \pm 0,40$ | 2,5 max.  | 0,25 ... 1,0  |

Termination: nickel barrier (CT) or silver palladium (CN)



VAR0391-D

### Recommended solder pad layout

| Type           | $A$<br>mm | $B$<br>mm | $C$<br>mm | $D$<br>mm |
|----------------|-----------|-----------|-----------|-----------|
| SIOV-CT/CN0402 | 0,6       | 0,6       | 0,5       | 1,7       |
| SIOV-CT/CN0603 | 1,0       | 1,0       | 1,0       | 3,0       |
| SIOV-CT/CN0805 | 1,4       | 1,2       | 1,0       | 3,4       |
| SIOV-CT/CN1206 | 1,8       | 1,2       | 2,1       | 4,5       |
| SIOV-CT/CN1210 | 2,8       | 1,2       | 2,1       | 4,5       |
| SIOV-CT/CN1812 | 3,6       | 1,5       | 3,0       | 6,0       |
| SIOV-CT/CN2220 | 5,5       | 1,5       | 4,2       | 7,2       |

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**Unternehmenskommunikation, Postfach 80 17 09, 81617 München, DEUTSCHLAND**

**☎ ++49 89 636 09, FAX (0 89) 636-2 26 89**

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