

## Strap Varistors

### HighE Series

#### Construction

- Round varistor element
- Coating: epoxy resin, flame-retardant to UL 94 V-0
- Bolt-holed strap terminals for screw fixing or soldering

#### Features

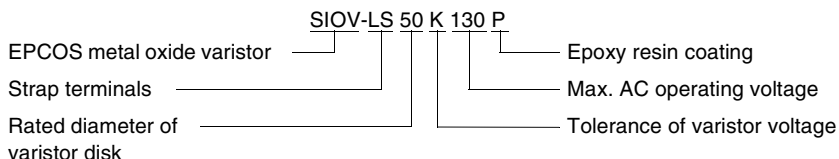
- Maximum load capacity with minimum size
- PSpice models

#### Approvals

- UL (all types)
- CSA (all types)

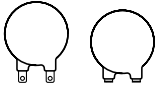
#### Type designation

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



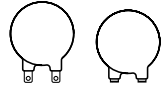
#### General technical data

|   |                         |                                  |
|---|-------------------------|----------------------------------|
| Climatic category                             | 40/85/56                | in accordance with IEC 60068-1   |
| LCT   | - 25 °C                 |                                  |
| UCT   | + 85 °C                 |                                  |
| Damp heat, steady state<br>(93 % r.h., 40 °C) | 56 days                 | in accordance with IEC 60068-2-3 |
| Operating temperature                         | - 25 ... + 85 °C        | in accordance with CECC 42 000   |
| Storage temperature                           | - 25 ... + 110 °C       |                                  |
| Electric strength                             | ≥ 2,5 kV <sub>RMS</sub> | in accordance with CECC 42 000   |
| Insulation resistance                         | ≥ 10 MΩ                 | in accordance with CECC 42 000   |
| Response time                                 | < 25 ns                 |                                  |


**Strap Varistors**
**HighE Series**
**Maximum ratings ( $T_A = 85\text{ }^\circ\text{C}$ )**

| Type      | Ordering code                     | Type        | Ordering code                     | $V_{RMS}$ | $V_{DC}$ | $i_{max}$<br>8/20 $\mu\text{s}$ | $W_{max}$<br>(2 ms) | $P_{max}$ |
|-----------|-----------------------------------|-------------|-----------------------------------|-----------|----------|---------------------------------|---------------------|-----------|
| SIOV-     |                                   | SIOV-       |                                   | V         | V        | A                               | J                   | W         |
| LS50K130P | B72250<br>L0131K100               | LS50K130PK2 | B72250<br>L0131K102 <sup>1)</sup> | 130       | 170      | 75000                           | 490                 | 1,5       |
| LS50K150P | B72250<br>L0151K100               | LS50K150PK2 | B72250<br>L0151K102 <sup>1)</sup> | 150       | 200      | 75000                           | 570                 | 1,5       |
| LS50K230P | B72250<br>L0231K100 <sup>1)</sup> | LS50K230PK2 | B72250<br>L0231K102 <sup>1)</sup> | 230       | 300      | 75000                           | 730                 | 1,5       |
| LS50K250P | B72250<br>L0251K100 <sup>1)</sup> | LS50K250PK2 | B72250<br>L0251K102 <sup>1)</sup> | 250       | 320      | 75000                           | 800                 | 1,5       |
| LS50K275P | B72250<br>L0271K100               | LS50K275PK2 | B72250<br>L0271K102 <sup>1)</sup> | 275       | 350      | 75000                           | 860                 | 1,5       |
| LS50K320P | B72250<br>L0321K100               | LS50K320PK2 | B72250<br>L0321K102 <sup>1)</sup> | 320       | 420      | 75000                           | 1000                | 1,5       |
| LS50K385P | B72250<br>L0381K100 <sup>1)</sup> | LS50K385PK2 | B72250<br>L0381K102 <sup>1)</sup> | 385       | 505      | 75000                           | 1200                | 1,5       |
| LS50K420P | B72250<br>L0421K100 <sup>1)</sup> | LS50K420PK2 | B72250<br>L0421K102 <sup>1)</sup> | 420       | 560      | 75000                           | 1500                | 1,5       |
| LS50K440P | B72250<br>L0441K100 <sup>1)</sup> | LS50K440PK2 | B72250<br>L0441K102 <sup>1)</sup> | 440       | 585      | 75000                           | 1580                | 1,5       |
| LS50K460P | B72250<br>L0461K100 <sup>1)</sup> | LS50K460PK2 | B72250<br>L0461K102 <sup>1)</sup> | 460       | 615      | 75000                           | 1650                | 1,5       |
| LS50K550P | B72250<br>L0551K100               | LS50K550PK2 | B72250<br>L0551K102 <sup>1)</sup> | 550       | 745      | 75000                           | 1500                | 1,5       |

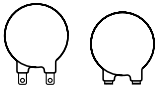
1) available upon request


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

| Types                   | $V_V$<br>(1 mA)<br>V | $\Delta V_V$<br>(1 mA)<br>% | Max. clamp. voltage |          | $C_{typ}$<br>(1 kHz)<br>pF | Derating<br>curve<br>Page | V/I char-<br>acteristic<br>Page |
|-------------------------|----------------------|-----------------------------|---------------------|----------|----------------------------|---------------------------|---------------------------------|
|                         |                      |                             | $v$<br>V            | $i$<br>A |                            |                           |                                 |
| LS50K130P / LS50K130PK2 | 205                  | $\pm 10$                    | 340                 | 500      | 10500                      | 262                       | 284                             |
| LS50K150P / LS50K150PK2 | 240                  | $\pm 10$                    | 395                 | 500      | 9500                       | 262                       | 284                             |
| LS50K230P / LS50K230PK2 | 360                  | $\pm 10$                    | 595                 | 500      | 6000                       | 262                       | 284                             |
| LS50K250P / LS50K250PK2 | 390                  | $\pm 10$                    | 650                 | 500      | 5600                       | 262                       | 284                             |
| LS50K275P / LS50K275PK2 | 430                  | $\pm 10$                    | 710                 | 500      | 5500                       | 262                       | 284                             |
| LS50K320P / LS50K320PK2 | 510                  | $\pm 10$                    | 840                 | 500      | 4300                       | 262                       | 284                             |
| LS50K385P / LS50K385PK2 | 620                  | $\pm 10$                    | 1025                | 500      | 3500                       | 262                       | 284                             |
| LS50K420P / LS50K420PK2 | 680                  | $\pm 10$                    | 1120                | 500      | 3300                       | 262                       | 284                             |
| LS50K440P / LS50K440PK2 | 715                  | $\pm 10$                    | 1180                | 500      | 3000                       | 262                       | 284                             |
| LS50K460P / LS50K460PK2 | 750                  | $\pm 10$                    | 1240                | 500      | 2900                       | 262                       | 284                             |
| LS50K550P / LS50K550PK2 | 910                  | $\pm 10$                    | 1500                | 500      | 2400                       | 262                       | 284                             |

Varistor elements without coating (suitable for soldering) are available upon request.

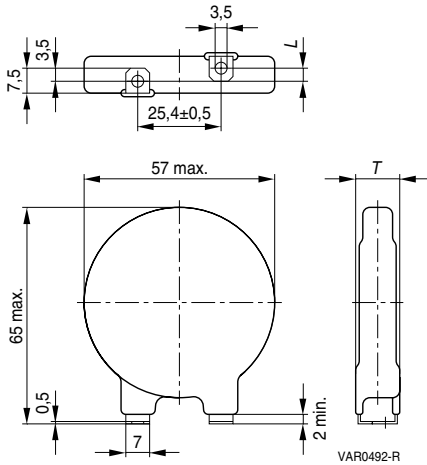
Designation: SIOV-D50K ... K6



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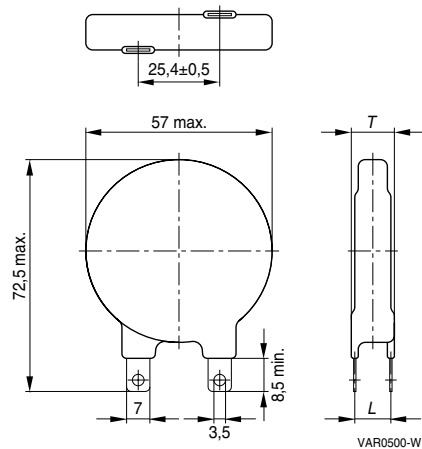
#### Dimensions



SIOV-LS50K ... P

Weight: 30 ... 90 g

| Type      | $T_{\max}$<br>mm | $L \pm 1,0$<br>mm |
|-----------|------------------|-------------------|
| SIOV-     |                  |                   |
| LS50K130P | 8,1              | - 3,5             |
| LS50K150P | 8,3              | - 3,2             |
| LS50K230P | 9,0              | - 2,0             |
| LS50K250P | 9,2              | - 1,8             |
| LS50K275P | 9,4              | - 1,6             |
| LS50K320P | 9,9              | - 1,1             |
| LS50K385P | 10,6             | - 0,4             |
| LS50K420P | 10,9             | 0,0               |
| LS50K440P | 11,1             | 0,2               |
| LS50K460P | 11,4             | 0,4               |
| LS50K550P | 12,3             | 1,2               |



SIOV-LS50K ... PK2

Weight: 30 ... 90 g

| Type        | $T_{\max}$<br>mm | $L \pm 1,0$<br>mm |
|-------------|------------------|-------------------|
| SIOV-       |                  |                   |
| LS50K130PK2 | 8,1              | 4,4               |
| LS50K150PK2 | 8,3              | 4,6               |
| LS50K230PK2 | 9,0              | 5,3               |
| LS50K250PK2 | 9,2              | 5,5               |
| LS50K275PK2 | 9,4              | 5,8               |
| LS50K320PK2 | 9,9              | 6,3               |
| LS50K385PK2 | 10,6             | 6,9               |
| LS50K420PK2 | 10,9             | 7,3               |
| LS50K440PK2 | 11,1             | 7,5               |
| LS50K460PK2 | 11,4             | 7,8               |
| LS50K550PK2 | 12,3             | 8,7               |

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