



**Special types for automotive applications**

**Maximum ratings** ( $T_A = 125^\circ\text{C}$ )

| Type             | Ordering code     | Operating voltage |                 | Surge current                          | Energy absorption          | Power dissipation | Load dump               |
|------------------|-------------------|-------------------|-----------------|--|----------------------------|-------------------|-------------------------|
|                  |                   | $V_{\text{RMS}}$  | $V_{\text{DC}}$ | $i_{\text{max}}$<br>8/20 $\mu\text{s}$ | $W_{\text{max}}$<br>(2 ms) | $P_{\text{max}}$  | $W_{\text{LD}}$<br>10 x |
|                  |                   | V                 | V               | A                                      | J                          | W                 | J                       |
| SIOV-            |                   |                   |                 |  |                            |                   |                         |
| -CN1206S14BAUTOG | Q69520-V1140-S262 | 14                | 16              | 100                                    | 0,4                        | 0,008             | 1,5                     |
| -CN1210S14BAUTOG | Q69530-V1140-S262 | 14                | 16              | 250                                    | 0,8                        | 0,01              | 3                       |
| -CN1812S14BAUTOG | Q69580-V1140-S262 | 14                | 16              | 500                                    | 1,7                        | 0,015             | 6                       |
| -CN2220S14BAUTOG | Q69540-V1140-S262 | 14                | 16              | 1000                                   | 3,6                        | 0,03              | 12                      |
| -CN2220K30AUTOG  | Q69540-V1300-K062 | 30                | 34              | 1000                                   | 6,3                        | 0,03              | 12                      |

For further information see data book page 49 ff. and page 73 ff.

**Special type for telecom applications**

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

| Type         | Ordering code     | Operating voltage |                 | Surge current                          | Energy absorption          | Power dissipation |
|--------------|-------------------|-------------------|-----------------|--|----------------------------|-------------------|
|              |                   | $V_{\text{RMS}}$  | $V_{\text{DC}}$ | $i_{\text{max}}$<br>8/20 $\mu\text{s}$ | $W_{\text{max}}$<br>(2 ms) | $P_{\text{max}}$  |
|              |                   | V                 | V               | A                                      | J                          | W                 |
| SIOV-        |                   |                   |                 |  |                            |                   |
| -CN1812S60AG | Q69580-V0600-S162 | 60                | 85              | 400                                    | 2,2                        | 0,015             |

The varistor CN1812S60AG is suitable for clamping the surge current of the 10/700  $\mu\text{s}$  pulse (10 x) according to the directives of the Central Telecommunications Engineering Office (Fernmeldetechnisches Zentralamt FTZ) of Germany's telecommunications administration.

For further informations see data book page 53 ff.



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

| Jump start<br>5 min.<br>$V_{\text{JUMP}}$<br>(1 mA)<br>V | Varistor<br>voltage<br>$V_V$<br>(1 mA)<br>V | Tolerance<br>$\Delta V_V$<br>(1 mA)<br>% | Max.<br>clamping<br>voltage |          | Capaci-<br>tance<br>typ.<br>$C$<br>(1 kHz)<br>pF | Derating<br>curves<br>Page | V/I<br>cha-<br>racteristic<br>Page |
|--|---|--|-----------------------------|----------|--|----------------------------|------------------------------------|
|  |   |  | $v$<br>V                    | $i$<br>A |  |                            |                                    |
| 24,5   | 22 ... 27                                   | SB <sup>1)</sup> = +23/-0                | 40                          | 1,0      | 800  | 10                         | 19                                 |
| 24,5   | 22 ... 27                                   | SB <sup>1)</sup> = +23/-0                | 40                          | 2,5      | 1700   | 11                         | 19                                 |
| 24,5   | 22 ... 27                                   | SB <sup>1)</sup> = +23/-0                | 40                          | 5,0      | 5600   | 12                         | 19                                 |
| 24,5   | 22 ... 27                                   | SB <sup>1)</sup> = +23/-0                | 40                          | 10       | 9500   | 13                         | 19                                 |
| 50   | 47  | K = $\pm 10$                             | 77                          | 10       | 4000   | 13                         | 18                                 |

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

| Min. resistance<br>$R_{\text{min}}$<br>(95 V)<br>k $\Omega$ | Max.<br>clamping voltage |          | Capacitance<br>typ.<br>$C$<br>(1 kHz)<br>pF | Derating<br>curves<br>Page | V/I<br>cha-<br>racteristic<br>Page |
|---|--------------------------|----------|---|----------------------------|------------------------------------|
|   | $v$<br>V                 | $i$<br>A |   |                            |                                    |
| 250   | 200                      | 45       | 400   | 12                         | -                                  |

1) Special tolerance "B", here 22 ... 27 V