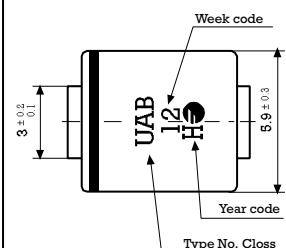
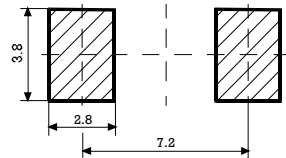


## 1500 W Unidirectional and Bidirectional Surface Mounted Transient Voltage Suppressor Diodes

| <p>Dimensions in mm.</p> <p>CASE:<br/>SMC/DO-214AB</p>                             | <p>Voltage<br/>6.8 to 220 V</p> <p>Power<br/>1500 W/ms</p>                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>• Glass passivated junction</li> <li>• Typical <math>I_{RM}</math> less than <math>1\mu A</math> above 10V</li> <li>• Response time typically <math>&lt; 1ns</math></li> <li>• The plastic material carries UL 94 V-0</li> <li>• Low profile package</li> <li>• Easy pick and place</li> <li>• High temperature soldering 260 °C 10 sec</li> </ul> |
|   | <p><b>MECHANICAL DATA</b></p> <p>Terminals: Solder plated, solderable per IEC 68-2-20.</p> <p>Standard Packaging: 8 mm. tape (EIA-RS-481)</p> <p>Weight: 1.12 g.</p>                                                                                                                                                                                                                      |

### Maximum Ratings and Electrical Characteristics at 25 °C

|                 |                                                                     |                  |
|-----------------|---------------------------------------------------------------------|------------------|
| $P_{PPM}$       | Peak Pulse Power Dissipation with 10/1000 $\mu s$ exponential pulse | 1500 W           |
| $I_{FSM}$       | Peak Forward Surge Current 8.3 ms. (Jedec Method) (Note 1)          | 200 A            |
| $V_F$           | Max. forward voltage drop at $I_F = 100 A$ (Note 1)                 | 3.5 V            |
| $T_J - T_{STG}$ | Operating Junction and Storage Temperature Range                    | - 65 to + 175 °C |

Note 1: Only for Unidirectional



1.5SMC6V8.....1.5SMC220A  
1.5SMC6V8C.....1.5SMC220CA

| Type           |              | Maximum Reverse Leakage Current<br>$I_{RM}$ at $V_{RM}$ |      | (1) Breakdown Voltage<br>$V_{BR}$ at $I_R$<br>(V) |      |      |      | Max. Clamping Voltage<br>$V_{CL}$ at $I_{PP}$<br>max. lms. Expo. |      |
|----------------|--------------|---------------------------------------------------------|------|---------------------------------------------------|------|------|------|------------------------------------------------------------------|------|
| Unidirectional | Marking Code | ( $\mu A$ )                                             | (V)  | Min.                                              | Nom. | Max. | (mA) | (V)                                                              | (A)  |
| 1.5SMC6V8      | UAA          | 1000                                                    | 5.50 | 6.12                                              | 6.8  | 7.48 | 10   | 10.8                                                             | 139  |
| 1.5SMC6V8A     | UAB          | 1000                                                    | 5.80 | 6.45                                              | 6.8  | 7.14 | 10   | 10.5                                                             | 143  |
| 1.5SMC7V5      | UAC          | 500                                                     | 6.05 | 6.75                                              | 7.5  | 8.25 | 10   | 11.7                                                             | 128  |
| 1.5SMC7V5A     | UAD          | 500                                                     | 6.40 | 7.13                                              | 7.5  | 7.88 | 10   | 11.3                                                             | 132  |
| 1.5SMC8V2      | UAE          | 200                                                     | 6.63 | 7.38                                              | 8.2  | 9.02 | 10   | 12.5                                                             | 120  |
| 1.5SMC8V2A     | UAF          | 200                                                     | 7.02 | 7.79                                              | 8.2  | 8.61 | 10   | 12.1                                                             | 124  |
| 1.5SMC9V1      | UAG          | 50                                                      | 7.37 | 8.19                                              | 9.1  | 10.0 | 1    | 13.8                                                             | 109  |
| 1.5SMC9V1A     | UAH          | 50                                                      | 7.78 | 8.65                                              | 9.1  | 9.55 | 1    | 13.4                                                             | 112  |
| 1.5SMC10       | UAK          | 10                                                      | 8.10 | 9.00                                              | 10   | 11.0 | 1    | 15.0                                                             | 100  |
| 1.5SMC10A      | UAL          | 10                                                      | 8.55 | 9.50                                              | 10   | 10.5 | 1    | 14.5                                                             | 103  |
| 1.5SMC11       | UAM          | 5                                                       | 8.92 | 9.90                                              | 11   | 12.1 | 1    | 16.2                                                             | 93   |
| 1.5SMC11A      | UAN          | 5                                                       | 9.40 | 10.5                                              | 11   | 11.6 | 1    | 15.6                                                             | 96   |
| 1.5SMC12       | UAP          | 5                                                       | 9.72 | 10.8                                              | 12   | 13.2 | 1    | 17.3                                                             | 87   |
| 1.5SMC12A      | UAR          | 5                                                       | 10.2 | 11.4                                              | 12   | 12.6 | 1    | 16.7                                                             | 90   |
| 1.5SMC13       | UAS          | 5                                                       | 10.5 | 11.7                                              | 13   | 14.3 | 1    | 19.0                                                             | 79   |
| 1.5SMC13A      | UAT          | 5                                                       | 11.1 | 12.4                                              | 13   | 13.7 | 1    | 18.2                                                             | 82   |
| 1.5SMC15       | UAU          | 5                                                       | 12.1 | 13.5                                              | 15   | 16.5 | 1    | 22.0                                                             | 68   |
| 1.5SMC15A      | UAV          | 5                                                       | 12.8 | 14.3                                              | 15   | 15.8 | 1    | 21.2                                                             | 71   |
| 1.5SMC16       | UAW          | 5                                                       | 12.9 | 14.4                                              | 16   | 17.6 | 1    | 23.5                                                             | 64   |
| 1.5SMC16A      | UAX          | 5                                                       | 13.6 | 15.2                                              | 16   | 16.8 | 1    | 22.5                                                             | 67   |
| 1.5SMC18       | UAY          | 5                                                       | 14.5 | 16.2                                              | 18   | 19.8 | 1    | 26.5                                                             | 56.5 |
| 1.5SMC18A      | UAZ          | 5                                                       | 15.3 | 17.1                                              | 18   | 18.9 | 1    | 25.5                                                             | 59.5 |
| 1.5SMC20       | UBA          | 5                                                       | 16.2 | 18.0                                              | 20   | 22.0 | 1    | 29.1                                                             | 51.5 |
| 1.5SMC20A      | UBB          | 5                                                       | 17.1 | 19.0                                              | 20   | 21.0 | 1    | 27.7                                                             | 54   |
| 1.5SMC22       | UBC          | 5                                                       | 17.8 | 19.8                                              | 22   | 24.2 | 1    | 31.9                                                             | 47   |
| 1.5SMC22A      | UBD          | 5                                                       | 18.8 | 20.9                                              | 22   | 23.1 | 1    | 30.6                                                             | 49   |
| 1.5SMC24       | UBE          | 5                                                       | 19.4 | 21.6                                              | 24   | 26.4 | 1    | 34.7                                                             | 43   |
| 1.5SMC24A      | UBF          | 5                                                       | 20.5 | 22.8                                              | 24   | 25.2 | 1    | 33.2                                                             | 45   |
| 1.5SMC27       | UBG          | 5                                                       | 21.8 | 24.3                                              | 27   | 29.7 | 1    | 39.1                                                             | 38.5 |
| 1.5SMC27A      | UBH          | 5                                                       | 23.1 | 25.7                                              | 27   | 28.4 | 1    | 37.5                                                             | 40   |
| 1.5SMC30       | UBK          | 5                                                       | 24.3 | 27.0                                              | 30   | 33.0 | 1    | 43.5                                                             | 34.5 |
| 1.5SMC30A      | UBL          | 5                                                       | 25.6 | 28.5                                              | 30   | 31.5 | 1    | 41.4                                                             | 36   |
| 1.5SMC33       | UBM          | 5                                                       | 26.8 | 29.7                                              | 33   | 36.3 | 1    | 47.7                                                             | 31.5 |
| 1.5SMC33A      | UBN          | 5                                                       | 28.2 | 31.4                                              | 33   | 34.7 | 1    | 45.7                                                             | 33   |
| 1.5SMC36       | UBP          | 5                                                       | 29.1 | 32.4                                              | 36   | 39.6 | 1    | 52.0                                                             | 29   |
| 1.5SMC36A      | UBR          | 5                                                       | 30.8 | 34.2                                              | 36   | 37.8 | 1    | 49.9                                                             | 30   |
| 1.5SMC39       | UBS          | 5                                                       | 31.6 | 35.1                                              | 39   | 42.9 | 1    | 56.4                                                             | 26.5 |
| 1.5SMC39A      | UBT          | 5                                                       | 33.3 | 37.1                                              | 39   | 41.0 | 1    | 53.9                                                             | 28   |
| 1.5SMC43       | UBU          | 5                                                       | 34.8 | 38.7                                              | 43   | 47.3 | 1    | 61.9                                                             | 24   |
| 1.5SMC43A      | UBV          | 5                                                       | 36.8 | 40.9                                              | 43   | 45.2 | 1    | 59.3                                                             | 25.3 |
| 1.5SMC47       | UBW          | 5                                                       | 38.1 | 42.3                                              | 47   | 51.7 | 1    | 67.8                                                             | 22.2 |
| 1.5SMC47A      | UBX          | 5                                                       | 40.2 | 44.7                                              | 47   | 49.4 | 1    | 64.8                                                             | 23.2 |
| 1.5SMC51       | UBY          | 5                                                       | 41.3 | 45.9                                              | 51   | 56.1 | 1    | 73.5                                                             | 20.4 |
| 1.5SMC51A      | UBZ          | 5                                                       | 43.6 | 48.5                                              | 51   | 53.6 | 1    | 70.1                                                             | 21.4 |

(1) Tested with pulses.  
Pulse test: tp  $\leq$  50 ms; d  $<$  2%



1.5SMC6V8.....1.5SMC220A  
1.5SMC6V8C.....1.5SMC220CA

| Type           |              | Maximum Reverse Leakage Current<br>$I_{RM}$ at $V_{RM}$ |      | (1) Breakdown Voltage<br>$V_{BR}$ at $I_R$<br>(V) |      |      |      | Max. Clamping Voltage<br>$V_{CL}$ at $I_{pp}$<br>max. 1ms. Expo. |      |
|----------------|--------------|---------------------------------------------------------|------|---------------------------------------------------|------|------|------|------------------------------------------------------------------|------|
| Unidirectional | Marking Code | ( $\mu A$ )                                             | (V)  | Min.                                              | Nom. | Max. | (mA) | (V)                                                              | (A)  |
| 1.5SMC56       | UCA          | 5                                                       | 45.4 | 50.4                                              | 56   | 61.6 | 1    | 80.5                                                             | 18.6 |
| 1.5SMC56A      | UCB          | 5                                                       | 47.8 | 53.2                                              | 56   | 58.8 | 1    | 77.0                                                             | 19.5 |
| 1.5SMC62       | UCC          | 5                                                       | 50.2 | 55.8                                              | 62   | 68.2 | 1    | 89.0                                                             | 16.9 |
| 1.5SMC62A      | UCD          | 5                                                       | 53.0 | 58.9                                              | 62   | 65.1 | 1    | 85.0                                                             | 17.7 |
| 1.5SMC68       | UCE          | 5                                                       | 55.1 | 61.2                                              | 68   | 74.8 | 1    | 98.0                                                             | 15.3 |
| 1.5SMC68A      | UCF          | 5                                                       | 58.1 | 64.6                                              | 68   | 71.4 | 1    | 92.0                                                             | 16.3 |
| 1.5SMC75       | UCG          | 5                                                       | 60.7 | 67.5                                              | 75   | 82.5 | 1    | 108                                                              | 13.9 |
| 1.5SMC75A      | UCH          | 5                                                       | 64.1 | 71.3                                              | 75   | 78.8 | 1    | 103                                                              | 14.6 |
| 1.5SMC82       | UCK          | 5                                                       | 66.4 | 73.8                                              | 82   | 90.2 | 1    | 118                                                              | 12.7 |
| 1.5SMC82A      | UCL          | 5                                                       | 70.1 | 77.9                                              | 82   | 86.1 | 1    | 113                                                              | 13.3 |
| 1.5SMC91       | UCM          | 5                                                       | 73.7 | 81.9                                              | 91   | 100  | 1    | 131                                                              | 11.4 |
| 1.5SMC91A      | UCN          | 5                                                       | 77.8 | 86.5                                              | 91   | 95.5 | 1    | 125                                                              | 12   |
| 1.5SMC100      | UCP          | 5                                                       | 81.0 | 90.0                                              | 100  | 110  | 1    | 144                                                              | 10.4 |
| 1.5SMC100A     | UCR          | 5                                                       | 85.5 | 95.0                                              | 100  | 105  | 1    | 137                                                              | 11   |
| 1.5SMC110      | UCS          | 5                                                       | 89.2 | 99.0                                              | 110  | 121  | 1    | 158                                                              | 9.5  |
| 1.5SMC110A     | UCT          | 5                                                       | 94.0 | 105                                               | 110  | 116  | 1    | 152                                                              | 9.9  |
| 1.5SMC120      | UCU          | 5                                                       | 97.2 | 108                                               | 120  | 132  | 1    | 173                                                              | 8.7  |
| 1.5SMC120A     | UCV          | 5                                                       | 102  | 114                                               | 120  | 126  | 1    | 165                                                              | 9.1  |
| 1.5SMC130      | UCW          | 5                                                       | 105  | 117                                               | 130  | 143  | 1    | 187                                                              | 8    |
| 1.5SMC130A     | UCX          | 5                                                       | 111  | 124                                               | 130  | 137  | 1    | 179                                                              | 8.4  |
| 1.5SMC150      | UCY          | 5                                                       | 121  | 135                                               | 150  | 165  | 1    | 215                                                              | 7    |
| 1.5SMC150A     | UCZ          | 5                                                       | 128  | 143                                               | 150  | 158  | 1    | 207                                                              | 7.2  |
| 1.5SMC160      | UDA          | 5                                                       | 130  | 144                                               | 160  | 176  | 1    | 230                                                              | 6.5  |
| 1.5SMC160A     | UDB          | 5                                                       | 136  | 152                                               | 160  | 168  | 1    | 219                                                              | 6.8  |
| 1.5SMC170      | UDC          | 5                                                       | 138  | 153                                               | 170  | 187  | 1    | 244                                                              | 6.2  |
| 1.5SMC170A     | UDD          | 5                                                       | 145  | 162                                               | 170  | 179  | 1    | 234                                                              | 6.4  |
| 1.5SMC180      | UDE          | 5                                                       | 146  | 162                                               | 180  | 198  | 1    | 258                                                              | 5.8  |
| 1.5SMC180A     | UDF          | 5                                                       | 154  | 171                                               | 180  | 189  | 1    | 246                                                              | 6.1  |
| 1.5SMC200      | UDG          | 5                                                       | 162  | 180                                               | 200  | 220  | 1    | 287                                                              | 5.2  |
| 1.5SMC200A     | UDH          | 5                                                       | 171  | 190                                               | 200  | 210  | 1    | 274                                                              | 5.5  |
| 1.5SMC220      | UDK          | 5                                                       | 175  | 198                                               | 220  | 242  | 1    | 344                                                              | 4.3  |
| 1.5SMC220A     | UDL          | 5                                                       | 185  | 209                                               | 220  | 231  | 1    | 328                                                              | 4.6  |

(1) Tested with pulses.  
Pulse test:  $t_p \leq 50$  ms;  $d < 2\%$



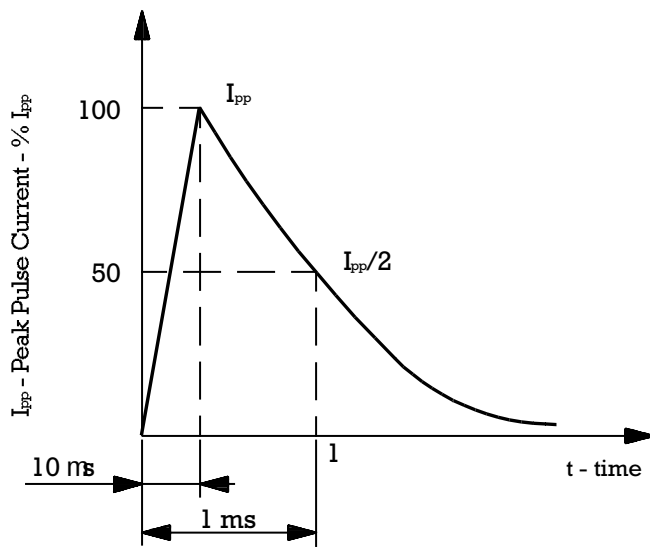
1.5SMC6V8.....1.5SMC220A  
1.5SMC6V8C.....1.5SMC220CA

| Type          |              | Maximum Reverse Leakage Current<br>$I_{RM}$ at $V_{RM}$ |      | (1) Breakdown Voltage<br>$V_{BR}$ at $I_R$<br>(V) |      |      |      | Max. Clamping Voltage<br>$V_{CL}$ at $I_{pp}$<br>max. 1ms. Expo. |      |
|---------------|--------------|---------------------------------------------------------|------|---------------------------------------------------|------|------|------|------------------------------------------------------------------|------|
| Bidirectional | Marking Code | ( $\mu A$ )                                             | (V)  | Min.                                              | Nom. | Max. | (mA) | (V)                                                              | (A)  |
| 1.5SMC6V8C    | BGA          | 1000                                                    | 5.50 | 6.12                                              | 6.8  | 7.48 | 10   | 10.8                                                             | 139  |
| 1.5SMC6V8CA   | BGB          | 1000                                                    | 5.80 | 6.45                                              | 6.8  | 7.14 | 10   | 10.5                                                             | 143  |
| 1.5SMC7V5C    | BGC          | 500                                                     | 6.05 | 6.75                                              | 7.5  | 8.25 | 10   | 11.7                                                             | 128  |
| 1.5SMC7V5CA   | BGD          | 500                                                     | 6.40 | 7.13                                              | 7.5  | 7.88 | 10   | 11.3                                                             | 132  |
| 1.5SMC8V2C    | BGE          | 200                                                     | 6.63 | 7.38                                              | 8.2  | 9.02 | 10   | 12.5                                                             | 120  |
| 1.5SMC8V2CA   | BGF          | 200                                                     | 7.02 | 7.79                                              | 8.2  | 8.61 | 10   | 12.1                                                             | 124  |
| 1.5SMC9V1C    | BGG          | 50                                                      | 7.37 | 8.19                                              | 9.1  | 10.0 | 1    | 13.8                                                             | 109  |
| 1.5SMC9V1CA   | BGH          | 50                                                      | 7.78 | 8.65                                              | 9.1  | 9.55 | 1    | 13.4                                                             | 112  |
| 1.5SMC10C     | BGK          | 10                                                      | 8.10 | 9.00                                              | 10   | 11.0 | 1    | 15.0                                                             | 100  |
| 1.5SMC10CA    | BGL          | 10                                                      | 8.55 | 9.50                                              | 10   | 10.5 | 1    | 14.5                                                             | 103  |
| 1.5SMC11C     | BGM          | 5                                                       | 8.92 | 9.90                                              | 11   | 12.1 | 1    | 16.2                                                             | 93   |
| 1.5SMC11CA    | BGN          | 5                                                       | 9.40 | 10.5                                              | 11   | 11.6 | 1    | 15.6                                                             | 96   |
| 1.5SMC12C     | BGP          | 5                                                       | 9.72 | 10.8                                              | 12   | 13.2 | 1    | 17.3                                                             | 87   |
| 1.5SMC12CA    | BGR          | 5                                                       | 10.2 | 11.4                                              | 12   | 12.6 | 1    | 16.7                                                             | 90   |
| 1.5SMC13C     | BGS          | 5                                                       | 10.5 | 11.7                                              | 13   | 14.3 | 1    | 19.0                                                             | 79   |
| 1.5SMC13CA    | BGT          | 5                                                       | 11.1 | 12.4                                              | 13   | 13.7 | 1    | 18.2                                                             | 82   |
| 1.5SMC15C     | BGU          | 5                                                       | 12.1 | 13.5                                              | 15   | 16.5 | 1    | 22.0                                                             | 68   |
| 1.5SMC15CA    | BGV          | 5                                                       | 12.8 | 14.3                                              | 15   | 15.8 | 1    | 21.2                                                             | 71   |
| 1.5SMC16C     | BGW          | 5                                                       | 12.9 | 14.4                                              | 16   | 17.6 | 1    | 23.5                                                             | 64   |
| 1.5SMC16CA    | BCX          | 5                                                       | 13.6 | 15.2                                              | 16   | 16.8 | 1    | 22.5                                                             | 67   |
| 1.5SMC18C     | BCY          | 5                                                       | 14.5 | 16.2                                              | 18   | 19.8 | 1    | 26.5                                                             | 56.5 |
| 1.5SMC18CA    | BGZ          | 5                                                       | 15.3 | 17.1                                              | 18   | 18.9 | 1    | 25.5                                                             | 59.5 |
| 1.5SMC20C     | BHA          | 5                                                       | 16.2 | 18.0                                              | 20   | 22.0 | 1    | 29.1                                                             | 51.5 |
| 1.5SMC20CA    | BHB          | 5                                                       | 17.1 | 19.0                                              | 20   | 21.0 | 1    | 27.7                                                             | 54   |
| 1.5SMC22C     | BHC          | 5                                                       | 17.8 | 19.8                                              | 22   | 24.2 | 1    | 31.9                                                             | 47   |
| 1.5SMC22CA    | BHD          | 5                                                       | 18.8 | 20.9                                              | 22   | 23.1 | 1    | 30.6                                                             | 49   |
| 1.5SMC24C     | BHE          | 5                                                       | 19.4 | 21.6                                              | 24   | 26.4 | 1    | 34.7                                                             | 43   |
| 1.5SMC24CA    | BHF          | 5                                                       | 20.5 | 22.8                                              | 24   | 25.2 | 1    | 33.2                                                             | 45   |
| 1.5SMC27C     | BHG          | 5                                                       | 21.8 | 24.3                                              | 27   | 29.7 | 1    | 39.1                                                             | 38.5 |
| 1.5SMC27CA    | BHH          | 5                                                       | 23.1 | 25.7                                              | 27   | 28.4 | 1    | 37.5                                                             | 40   |
| 1.5SMC30C     | BHK          | 5                                                       | 24.3 | 27.0                                              | 30   | 33.0 | 1    | 43.5                                                             | 34.5 |
| 1.5SMC30CA    | BHL          | 5                                                       | 25.6 | 28.5                                              | 30   | 31.5 | 1    | 41.4                                                             | 36   |
| 1.5SMC33C     | BHM          | 5                                                       | 26.8 | 29.7                                              | 33   | 36.3 | 1    | 47.7                                                             | 31.5 |
| 1.5SMC33CA    | BHN          | 5                                                       | 28.2 | 31.4                                              | 33   | 34.7 | 1    | 45.7                                                             | 33   |
| 1.5SMC36C     | BHP          | 5                                                       | 29.1 | 32.4                                              | 36   | 39.6 | 1    | 52.0                                                             | 29   |
| 1.5SMC36CA    | BHR          | 5                                                       | 30.8 | 34.2                                              | 36   | 37.8 | 1    | 49.9                                                             | 30   |
| 1.5SMC39C     | BHS          | 5                                                       | 31.6 | 35.1                                              | 39   | 42.9 | 1    | 56.4                                                             | 26.5 |
| 1.5SMC39CA    | BHT          | 5                                                       | 33.3 | 37.1                                              | 39   | 41.0 | 1    | 53.9                                                             | 28   |
| 1.5SMC43C     | BHU          | 5                                                       | 34.8 | 38.7                                              | 43   | 47.3 | 1    | 61.9                                                             | 24   |
| 1.5SMC43CA    | BHV          | 5                                                       | 36.8 | 40.9                                              | 43   | 45.2 | 1    | 59.3                                                             | 25.3 |
| 1.5SMC47C     | BHW          | 5                                                       | 38.1 | 42.3                                              | 47   | 51.7 | 1    | 67.8                                                             | 22.2 |
| 1.5SMC47CA    | BHX          | 5                                                       | 40.2 | 44.7                                              | 47   | 49.4 | 1    | 64.8                                                             | 23.2 |
| 1.5SMC51C     | BHY          | 5                                                       | 41.3 | 45.9                                              | 51   | 56.1 | 1    | 73.5                                                             | 20.4 |
| 1.5SMC51CA    | BHZ          | 5                                                       | 43.6 | 48.5                                              | 51   | 53.6 | 1    | 70.1                                                             | 21.4 |

(1) Tested with pulses.  
Pulse test: tp  $\leq$  50 ms; d  $<$  2%

| Type          |              | Maximum Reverse Leakage Current<br>$I_{RM}$ at $V_{RM}$ |      | (1) Breakdown Voltage<br>$V_{BR}$ at $I_R$<br>(V) |      |      |      | Max. Clamping Voltage<br>$V_{CL}$ at $I_{PP}$<br>max. 1ms. Expo. |      |
|---------------|--------------|---------------------------------------------------------|------|---------------------------------------------------|------|------|------|------------------------------------------------------------------|------|
| Bidirectional | Marking Code | ( $\mu A$ )                                             | (V)  | Min.                                              | Nom. | Max. | (mA) | (V)                                                              | (A)  |
| 1.5SMC56C     | BKA          | 5                                                       | 45.4 | 50.4                                              | 56   | 61.6 | 1    | 80.5                                                             | 18.6 |
| 1.5SMC56CA    | BKB          | 5                                                       | 47.8 | 53.2                                              | 56   | 58.8 | 1    | 77.0                                                             | 19.5 |
| 1.5SMC62C     | BKC          | 5                                                       | 50.2 | 55.8                                              | 62   | 68.2 | 1    | 89.0                                                             | 16.9 |
| 1.5SMC62CA    | BKD          | 5                                                       | 53.0 | 58.9                                              | 62   | 65.1 | 1    | 85.0                                                             | 17.7 |
| 1.5SMC68C     | BKE          | 5                                                       | 55.1 | 61.2                                              | 68   | 74.8 | 1    | 98.0                                                             | 15.3 |
| 1.5SMC68CA    | BKF          | 5                                                       | 58.1 | 64.6                                              | 68   | 71.4 | 1    | 92.0                                                             | 16.3 |
| 1.5SMC75C     | BKG          | 5                                                       | 60.7 | 67.5                                              | 75   | 82.5 | 1    | 108                                                              | 13.9 |
| 1.5SMC75CA    | BKH          | 5                                                       | 64.1 | 71.3                                              | 75   | 78.8 | 1    | 103                                                              | 14.6 |
| 1.5SMC82C     | BKK          | 5                                                       | 66.4 | 73.8                                              | 82   | 90.2 | 1    | 118                                                              | 12.7 |
| 1.5SMC82CA    | BKL          | 5                                                       | 70.1 | 77.9                                              | 82   | 86.1 | 1    | 113                                                              | 13.3 |
| 1.5SMC91C     | BKM          | 5                                                       | 73.7 | 81.9                                              | 91   | 100  | 1    | 131                                                              | 11.4 |
| 1.5SMC91CA    | BKN          | 5                                                       | 77.8 | 86.5                                              | 91   | 95.5 | 1    | 125                                                              | 12   |
| 1.5SMC100C    | BKP          | 5                                                       | 81.0 | 90.0                                              | 100  | 110  | 1    | 144                                                              | 10.4 |
| 1.5SMC100CA   | BKR          | 5                                                       | 85.5 | 95.0                                              | 100  | 105  | 1    | 137                                                              | 11   |
| 1.5SMC110C    | BKS          | 5                                                       | 89.2 | 99.0                                              | 110  | 121  | 1    | 158                                                              | 9.5  |
| 1.5SMC110CA   | BKT          | 5                                                       | 94.0 | 105                                               | 110  | 116  | 1    | 152                                                              | 9.9  |
| 1.5SMC120C    | BKU          | 5                                                       | 97.2 | 108                                               | 120  | 132  | 1    | 173                                                              | 8.7  |
| 1.5SMC120CA   | BKV          | 5                                                       | 102  | 114                                               | 120  | 126  | 1    | 165                                                              | 9.1  |
| 1.5SMC130C    | BKW          | 5                                                       | 105  | 117                                               | 130  | 143  | 1    | 187                                                              | 8    |
| 1.5SMC130CA   | BKX          | 5                                                       | 111  | 124                                               | 130  | 137  | 1    | 179                                                              | 8.4  |
| 1.5SMC150C    | BKY          | 5                                                       | 121  | 135                                               | 150  | 165  | 1    | 215                                                              | 7    |
| 1.5SMC150CA   | BKZ          | 5                                                       | 128  | 143                                               | 150  | 158  | 1    | 207                                                              | 7.2  |
| 1.5SMC160C    | BLA          | 5                                                       | 130  | 144                                               | 160  | 176  | 1    | 230                                                              | 6.5  |
| 1.5SMC160CA   | BLB          | 5                                                       | 136  | 152                                               | 160  | 168  | 1    | 219                                                              | 6.8  |
| 1.5SMC170C    | BLC          | 5                                                       | 138  | 153                                               | 170  | 187  | 1    | 244                                                              | 6.2  |
| 1.5SMC170CA   | BLD          | 5                                                       | 145  | 162                                               | 170  | 179  | 1    | 234                                                              | 6.4  |
| 1.5SMC180C    | BLE          | 5                                                       | 146  | 162                                               | 180  | 198  | 1    | 258                                                              | 5.8  |
| 1.5SMC180CA   | BLF          | 5                                                       | 154  | 171                                               | 180  | 189  | 1    | 246                                                              | 6.1  |
| 1.5SMC200C    | BLG          | 5                                                       | 162  | 180                                               | 200  | 220  | 1    | 287                                                              | 5.2  |
| 1.5SMC200CA   | BLH          | 5                                                       | 171  | 190                                               | 200  | 210  | 1    | 274                                                              | 5.5  |
| 1.5SMC220C    | BLK          | 5                                                       | 175  | 198                                               | 220  | 242  | 1    | 344                                                              | 4.3  |
| 1.5SMC220CA   | BLL          | 5                                                       | 185  | 209                                               | 220  | 231  | 1    | 328                                                              | 4.6  |

(1) Tested with pulses.  
Pulse test:  $t_p \leq 50$  ms;  $d < 2\%$



Pulse wave form 10/1000

