

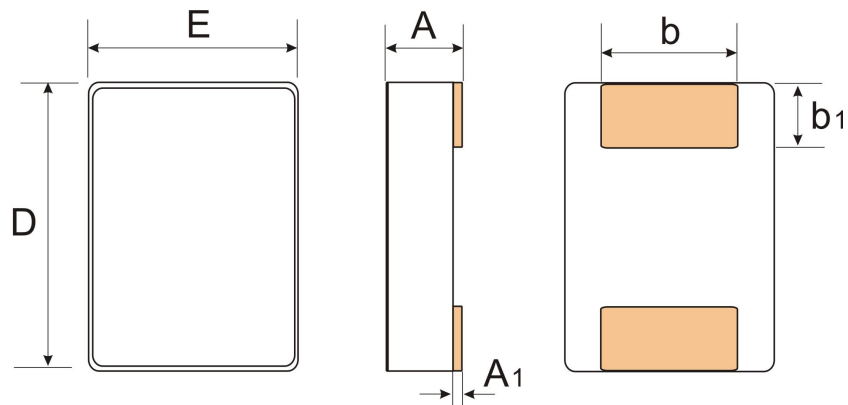
SY065（C）A～SY06440（C）A 型瞬态电压抑制二极管

（替代 SMBJ6.0（C）A～SMBJ440（C）A）

特点

- 响应时间快、瞬态功率大、漏电流小
- 芯片采用台面结构
- 金属陶瓷封装

封装外形：SMD-0.1



单位为毫米

| 尺寸符号  | 数 值  |      | 尺寸符号  | 数 值  |      |
|-------|------|------|-------|------|------|
|       | 最 小  | 最 大  |       | 最 小  | 最 大  |
| $A$   | —    | 3.08 | $b_1$ | 1.18 | 1.72 |
| $A_1$ | —    | 0.5  | $D$   | —    | 6.25 |
| $b$   | 1.88 | 2.22 | $E$   | —    | 3.72 |

SMD-0.1 外形尺寸

最大额定值

| 参数名称                                                             | 符号               | 最大额定值   | 单位                 |
|------------------------------------------------------------------|------------------|---------|--------------------|
| 峰值脉冲功率<br>( $T_A=25^{\circ}\text{C}$ ，10/1000 $\mu\text{s}$ 指数波) | $P_{\text{PPM}}$ | 600     | W                  |
| 工作温度                                                             | $T_{\text{amb}}$ | -55～125 | $^{\circ}\text{C}$ |
| 贮存温度                                                             | $T_{\text{stg}}$ | -55～150 | $^{\circ}\text{C}$ |

电特性（T<sub>A</sub>=25℃）

| <div> <div>参数</div> <div>型号</div> </div> | 最大反<br>向工作<br>电压     | 击穿电压 V <sub>BR</sub> @I <sub>T</sub> |         | 测试<br>电流            | 最大箝位<br>电压@I <sub>PP</sub> | 最大峰<br>值脉冲<br>电流    | 最大反<br>向电流<br>@V <sub>RWM</sub> | 替代国外<br>产品型号 |
|------------------------------------------|----------------------|--------------------------------------|---------|---------------------|----------------------------|---------------------|---------------------------------|--------------|
|                                          | V <sub>RWM</sub> (V) | 最小值 (V)                              | 最大值 (V) | I <sub>T</sub> (mA) | V <sub>C</sub> (V)         | I <sub>PP</sub> (A) | I <sub>R</sub> (μA)             |              |
| SY065A                                   | 5.0                  | 6.40                                 | 7.00    | 10                  | 9.2                        | 65.2                | 800                             | SMBJ5.0A     |
| SY065CA                                  |                      |                                      |         |                     |                            |                     |                                 | SMBJ5.0CA    |
| SY066A                                   | 6.0                  | 6.67                                 | 7.37    | 10                  | 10.3                       | 58.3                | 800                             | SMBJ6.0A     |
| SY066CA                                  |                      |                                      |         |                     |                            |                     |                                 | SMBJ6.0CA    |
| SY067A                                   | 7.0                  | 7.78                                 | 8.60    | 10                  | 12.0                       | 50.0                | 200                             | SMBJ7.0A     |
| SY067CA                                  |                      |                                      |         |                     |                            |                     |                                 | SMBJ7.0CA    |
| SY068A                                   | 8.0                  | 8.89                                 | 9.83    | 1                   | 13.6                       | 44.2                | 50                              | SMBJ8.0A     |
| SY068CA                                  |                      |                                      |         |                     |                            |                     |                                 | SMBJ8.0CA    |
| SY069A                                   | 9.0                  | 10.0                                 | 11.1    | 1                   | 15.4                       | 39.0                | 10                              | SMBJ9.0A     |
| SY069CA                                  |                      |                                      |         |                     |                            |                     |                                 | SMBJ9.0CA    |
| SY0610A                                  | 10.0                 | 11.1                                 | 12.3    | 1                   | 17.0                       | 35.3                | 5                               | SMBJ10A      |
| SY0610CA                                 |                      |                                      |         |                     |                            |                     |                                 | SMBJ10CA     |
| SY0611A                                  | 11.0                 | 12.2                                 | 13.5    | 1                   | 18.2                       | 33.0                | 2                               | SMBJ11A      |
| SY0611CA                                 |                      |                                      |         |                     |                            |                     |                                 | SMBJ11CA     |
| SY0612A                                  | 12.0                 | 13.3                                 | 14.7    | 1                   | 19.9                       | 30.2                | 2                               | SMBJ12A      |
| SY0612CA                                 |                      |                                      |         |                     |                            |                     |                                 | SMBJ12CA     |
| SY0613A                                  | 13.0                 | 14.4                                 | 15.9    | 1                   | 21.5                       | 27.9                | 2                               | SMBJ13A      |
| SY0613CA                                 |                      |                                      |         |                     |                            |                     |                                 | SMBJ13CA     |
| SY0614A                                  | 14.0                 | 15.6                                 | 17.2    | 1                   | 23.2                       | 25.8                | 2                               | SMBJ14A      |
| SY0614CA                                 |                      |                                      |         |                     |                            |                     |                                 | SMBJ14CA     |
| SY0615A                                  | 15.0                 | 16.7                                 | 18.5    | 1                   | 24.4                       | 24.6                | 2                               | SMBJ15A      |
| SY0615CA                                 |                      |                                      |         |                     |                            |                     |                                 | SMBJ15CA     |
| SY0616A                                  | 16.0                 | 17.8                                 | 19.7    | 1                   | 26.0                       | 23.1                | 2                               | SMBJ16A      |
| SY0616CA                                 |                      |                                      |         |                     |                            |                     |                                 | SMBJ16CA     |
| SY0617A                                  | 17.0                 | 18.9                                 | 20.9    | 1                   | 27.6                       | 21.7                | 2                               | SMBJ17A      |
| SY0617CA                                 |                      |                                      |         |                     |                            |                     |                                 | SMBJ17CA     |
| SY0618A                                  | 18.0                 | 20.0                                 | 22.1    | 1                   | 29.2                       | 20.5                | 2                               | SMBJ18A      |
| SY0618CA                                 |                      |                                      |         |                     |                            |                     |                                 | SMBJ18CA     |
| SY0620A                                  | 20.0                 | 22.2                                 | 24.5    | 1                   | 32.4                       | 18.5                | 2                               | SMBJ20A      |
| SY0620CA                                 |                      |                                      |         |                     |                            |                     |                                 | SMBJ20CA     |
| SY0622A                                  | 22.0                 | 24.4                                 | 26.9    | 1                   | 35.5                       | 16.9                | 2                               | SMBJ22A      |
| SY0622CA                                 |                      |                                      |         |                     |                            |                     |                                 | SMBJ22CA     |
| SY0624A                                  | 24.0                 | 26.7                                 | 29.5    | 1                   | 38.9                       | 15.4                | 2                               | SMBJ24A      |
| SY0624CA                                 |                      |                                      |         |                     |                            |                     |                                 | SMBJ24CA     |
| SY0626A                                  | 26.0                 | 28.9                                 | 31.9    | 1                   | 42.1                       | 14.2                | 2                               | SMBJ26A      |

| 参数<br>型号 | 最大反<br>向工作<br>电压 | 击穿电压 $V_{BR}@I_T$ |         | 测试<br>电流   | 最大箝位<br>电压 $@I_{PP}$ | 最大峰<br>值脉冲<br>电流 | 最大反<br>向电流<br>$@V_{RWM}$ | 替代国外<br>产品型号 |
|----------|------------------|-------------------|---------|------------|----------------------|------------------|--------------------------|--------------|
|          | $V_{RWM}$ (V)    | 最小值 (V)           | 最大值 (V) | $I_T$ (mA) | $V_C$ (V)            | $I_{PP}$ (A)     | $I_R$ (μA)               |              |
| SY0626CA |                  |                   |         |            |                      |                  |                          | SMBJ26CA     |
| SY0628A  | 28.0             | 31.1              | 34.4    | 1          | 45.4                 | 13.2             | 2                        | SMBJ28A      |
| SY0628CA |                  |                   |         |            |                      |                  |                          | SMBJ28CA     |
| SY0630A  | 30.0             | 33.3              | 36.8    | 1          | 48.4                 | 12.4             | 2                        | SMBJ30A      |
| SY0630CA |                  |                   |         |            |                      |                  |                          | SMBJ30CA     |
| SY0633A  | 33.0             | 36.7              | 40.6    | 1          | 53.3                 | 11.3             | 2                        | SMBJ33A      |
| SY0633CA |                  |                   |         |            |                      |                  |                          | SMBJ30CA     |
| SY0636A  | 36.0             | 40.0              | 44.2    | 1          | 58.1                 | 10.3             | 2                        | SMBJ33A      |
| SY0636CA |                  |                   |         |            |                      |                  |                          | SMBJ33CA     |
| SY0640A  | 40.0             | 44.4              | 49.1    | 1          | 64.5                 | 9.3              | 2                        | SMBJ40A      |
| SY0640CA |                  |                   |         |            |                      |                  |                          | SMBJ40CA     |
| SY0643A  | 43.0             | 47.8              | 52.8    | 1          | 69.4                 | 8.6              | 2                        | SMBJ43A      |
| SY0643CA |                  |                   |         |            |                      |                  |                          | SMBJ43CA     |
| SY0645A  | 45.0             | 50.0              | 55.3    | 1          | 72.7                 | 8.3              | 2                        | SMBJ45A      |
| SY0645CA |                  |                   |         |            |                      |                  |                          | SMBJ45CA     |
| SY0648A  | 48.0             | 53.3              | 58.9    | 1          | 77.4                 | 7.7              | 2                        | SMBJ48A      |
| SY0648CA |                  |                   |         |            |                      |                  |                          | SMBJ48CA     |
| SY0651A  | 51.0             | 56.7              | 62.7    | 1          | 82.4                 | 7.3              | 2                        | SMBJ51A      |
| SY0651CA |                  |                   |         |            |                      |                  |                          | SMBJ51CA     |
| SY0654A  | 54.0             | 60.0              | 66.3    | 1          | 87.1                 | 6.9              | 2                        | SMBJ54A      |
| SY0654CA |                  |                   |         |            |                      |                  |                          | SMBJ54CA     |
| SY0658A  | 58.0             | 64.4              | 71.2    | 1          | 93.6                 | 6.4              | 2                        | SMBJ58A      |
| SY0658CA |                  |                   |         |            |                      |                  |                          | SMBJ58CA     |
| SY0660A  | 60.0             | 66.7              | 73.7    | 1          | 96.8                 | 6.2              | 2                        | SMBJ60A      |
| SY0660CA |                  |                   |         |            |                      |                  |                          | SMBJ60CA     |
| SY0664A  | 64.0             | 71.1              | 78.6    | 1          | 103.0                | 5.8              | 2                        | SMBJ64A      |
| SY0664CA |                  |                   |         |            |                      |                  |                          | SMBJ64CA     |
| SY0670A  | 70.0             | 77.8              | 86.0    | 1          | 113.0                | 5.3              | 2                        | SMBJ70A      |
| SY0670CA |                  |                   |         |            |                      |                  |                          | SMBJ70CA     |
| SY0675A  | 75.0             | 83.3              | 92.1    | 1          | 121.0                | 4.9              | 2                        | SMBJ75A      |
| SY0675CA |                  |                   |         |            |                      |                  |                          | SMBJ75CA     |
| SY0678A  | 78.0             | 86.7              | 95.8    | 1          | 126.0                | 4.7              | 2                        | SMBJ78A      |
| SY0678CA |                  |                   |         |            |                      |                  |                          | SMBJ78CA     |
| SY0685A  | 85.0             | 94.4              | 104.0   | 1          | 137.0                | 4.4              | 2                        | SMBJ85A      |
| SY0685CA |                  |                   |         |            |                      |                  |                          | SMBJ85CA     |
| SY0690A  | 90.0             | 100.0             | 111.0   | 1          | 146.0                | 4.1              | 2                        | SMBJ90A      |
| SY0690CA |                  |                   |         |            |                      |                  |                          | SMBJ90CA     |
| SY06100A | 100.0            | 111.0             | 123.0   | 1          | 162.0                | 3.7              | 2                        | SMBJ100A     |

| 参数<br>型号  | 最大反<br>向工作<br>电压 | 击穿电压 $V_{BR}@I_T$ |         | 测试<br>电流   | 最大箝位<br>电压 $@I_{PP}$ | 最大峰<br>值脉冲<br>电流 | 最大反<br>向电流<br>$@V_{RWM}$ | 替代国外<br>产品型号 |
|-----------|------------------|-------------------|---------|------------|----------------------|------------------|--------------------------|--------------|
|           | $V_{RWM}$ (V)    | 最小值 (V)           | 最大值 (V) | $I_T$ (mA) | $V_C$ (V)            | $I_{PP}$ (A)     | $I_R$ (μA)               |              |
| SY06100CA |                  |                   |         |            |                      |                  |                          | SMBJ100CA    |
| SY06110A  | 110.0            | 122.0             | 135.0   | 1          | 177.0                | 3.4              | 2                        | SMBJ110A     |
| SY06110CA |                  |                   |         |            |                      |                  |                          | SMBJ110CA    |
| SY06120A  | 120.0            | 133.0             | 147.0   | 1          | 193.0                | 3.1              | 2                        | SMBJ120A     |
| SY06120CA |                  |                   |         |            |                      |                  |                          | SMBJ120CA    |
| SY06130A  | 130.0            | 144.0             | 159.0   | 1          | 209.0                | 2.9              | 2                        | SMBJ130A     |
| SY06130CA |                  |                   |         |            |                      |                  |                          | SMBJ130CA    |
| SY06150A  | 150.0            | 167.0             | 185.0   | 1          | 243.0                | 2.5              | 2                        | SMBJ150A     |
| SY06150CA |                  |                   |         |            |                      |                  |                          | SMBJ150CA    |
| SY06160A  | 160.0            | 178.0             | 197.0   | 1          | 259.0                | 2.3              | 2                        | SMBJ160A     |
| SY06160CA |                  |                   |         |            |                      |                  |                          | SMBJ160CA    |
| SY06170A  | 170.0            | 189.0             | 209.0   | 1          | 275.0                | 2.2              | 2                        | SMBJ170A     |
| SY06170CA |                  |                   |         |            |                      |                  |                          | SMBJ170CA    |
| SY06180A  | 180.0            | 200.0             | 230.4   | 1          | 290.0                | 2.1              | 2                        | SMBJ180A     |
| SY06180CA |                  |                   |         |            |                      |                  |                          | SMBJ180CA    |
| SY06190A  | 190.0            | 211.0             | 243.1   | 1          | 306.0                | 2.0              | 2                        | SMBJ190A     |
| SY06190CA |                  |                   |         |            |                      |                  |                          | SMBJ190CA    |
| SY06200A  | 200.0            | 222.0             | 256.0   | 1          | 322.0                | 1.9              | 2                        | SMBJ200A     |
| SY06200CA |                  |                   |         |            |                      |                  |                          | SMBJ200CA    |
| SY06210A  | 210.0            | 233.0             | 268.8   | 1          | 339.0                | 1.8              | 2                        | SMBJ210A     |
| SY06210CA |                  |                   |         |            |                      |                  |                          | SMBJ210CA    |
| SY06220A  | 220.0            | 244.0             | 281.6   | 1          | 355.0                | 1.7              | 2                        | SMBJ220A     |
| SY06220CA |                  |                   |         |            |                      |                  |                          | SMBJ220CA    |
| SY06250A  | 250.0            | 278.0             | 309.0   | 1          | 403.0                | 1.5              | 2                        | SMBJ250A     |
| SY06250CA |                  |                   |         |            |                      |                  |                          | SMBJ250CA    |
| SY06300A  | 300.0            | 333.0             | 371.0   | 1          | 484.0                | 1.2              | 2                        | SMBJ300A     |
| SY06300CA |                  |                   |         |            |                      |                  |                          | SMBJ300CA    |
| SY06350A  | 350.0            | 389.0             | 432.0   | 1          | 565.0                | 1.1              | 2                        | SMBJ350A     |
| SY06350CA |                  |                   |         |            |                      |                  |                          | SMBJ350CA    |
| SY06400A  | 400.0            | 444.0             | 494.0   | 1          | 645.0                | 0.9              | 2                        | SMBJ400A     |
| SY06400CA |                  |                   |         |            |                      |                  |                          | SMBJ400CA    |
| SY06440A  | 440.0            | 489.0             | 543.0   | 1          | 710.0                | 0.8              | 2                        | SMBJ440A     |
| SY06440CA |                  |                   |         |            |                      |                  |                          | SMBJ440CA    |

注：产品型号中有“C”表示双向器件，无“C”表示单向器件。