

### 表面贴装型

系列：S 类型：V  
高温无铅回流焊应对产品 (末尾 A\*)



### 特 点

- 保证时间：85 °C 2000 小时
- 可满足耐振要求 ( $\phi 8 \leq$ )
- 已应对RoHS指令

### 规 格

|                           |   |                             |    |    |    |                    |    |                |
|---------------------------|---|-----------------------------|----|----|----|--------------------|----|----------------|
| 类别温度范围                    | -40 °C ~ +85 °C   |                             |    |    |    |                    |    |                |
| 额定电压范围                    | 6.3 V.DC ~ 50 V.DC  |                             |    |    |    |                    |    |                |
| 静电容量范围                    | 1 $\mu$ F ~ 1500 $\mu$ F  |                             |    |    |    |                    |    |                |
| 静电容量容差                    | $\pm 20$ % (120 Hz/+20 °C)  |                             |    |    |    |                    |    |                |
| 漏电流                       | $I \leq 0.01 CV$ 或 3 ( $\mu$ A) 2 分值 (任一大值以下)   |                             |    |    |    |                    |    |                |
| 损耗角的正切 ( $\tan \delta$ )  | 请参照特性一览表  |                             |    |    |    |                    |    |                |
| 温度特性                      | 额定电压 (V.DC)   | 6.3                         | 10 | 16 | 25 | 35                 | 50 | (120 Hz 时的阻抗比) |
|                           | Z(-25 °C)/Z(+20 °C)   | 4                           | 3  | 2  | 2  | 2                  | 2  |                |
|                           | Z(-40 °C)/Z(+20 °C)   | 8                           | 6  | 4  | 4  | 3                  | 3  |                |
| 耐久性                       | 在 +85 °C $\pm 2$ °C 的情况下连续 2000 小时 (小型化产品为 1000 小时) 施加额定电压后, 恢复至常温后应满足以下指标。             |                             |    |    |    |                    |    |                |
|                           | 静电容量变化  | 初始值 $\pm 20$ % 以内           |    |    |    |                    |    | 静电容量变化率        |
|                           |   | 尺寸代码 (尺寸)                   |    |    |    |                    |    |                |
|                           |   | D8( $\phi 6.3 \times 7.7$ ) |    |    |    |                    |    |                |
| $\leq D(\phi 6.3)$ 的小型化产品 |   |                             |    |    |    | 1000 小时 $\pm 30$ % |    |                |
| $\tan \delta$             | 不大于初始标准值的 200 %   |                             |    |    |    |                    |    |                |
| 漏电流                       | 不大于初始标准值  |                             |    |    |    |                    |    |                |
| 高温无负载特性                   | 在 +85 °C $\pm 2$ °C 的情况下连续 1000 小时, 恢复至常温后, 应满足上述各项耐久性。(但须有电压处理) 经回流焊接并恢复至常温后, 应满足以下指标。 |                             |    |    |    |                    |    |                |
| 焊接耐热性                     | 静电容量变化  | 初始值 $\pm 10$ % 以内           |    |    |    |                    |    |                |
|                           | $\tan \delta$   | 不大于初始标准值                    |    |    |    |                    |    |                |
|                           | 漏电流   | 不大于初始标准值                    |    |    |    |                    |    |                |
| AEC-Q200                  | 符号 AEC-Q200   |                             |    |    |    |                    |    |                |

### 额定纹波电流 频率修正系数

|         |        |      |      |        |
|---------|--------|------|------|--------|
| 频率 (Hz) | 50, 60 | 120  | 1 k  | 10 k ~ |
| 系数      | 0.70   | 1.00 | 1.30 | 1.70   |

### 标 示 外 观 尺 寸

例：6.3 V.DC 22  $\mu$ F  
标示颜色：BLACK

极性标示 (-)  
静电容量 ( $\mu$ F)  
系列符号 (S) or (A)  
无铅适用产品标记 (黑点)  
批号  
额定电压 (V.DC) (6=6.3 V.DC)

(单位：mm)

| 尺寸代码 | $\phi D$ | L              | A, B | H        | I   | W              | P   | K               |
|------|----------|----------------|------|----------|-----|----------------|-----|-----------------|
| B    | 4.0      | $5.4^{+0.2}$   | 4.3  | 5.5 max  | 1.8 | $0.65 \pm 0.1$ | 1.0 | $0.35^{+0.15}$  |
| C    | 5.0      | $5.4^{+0.2}$   | 5.3  | 6.5 max  | 2.2 | $0.65 \pm 0.1$ | 1.5 | $0.35^{+0.15}$  |
| D    | 6.3      | $5.4^{+0.2}$   | 6.6  | 7.8 max  | 2.6 | $0.65 \pm 0.1$ | 1.8 | $0.35^{+0.15}$  |
| D8   | 6.3      | $7.7 \pm 0.3$  | 6.6  | 7.8 max  | 2.6 | $0.65 \pm 0.1$ | 1.8 | $0.35^{+0.15}$  |
| E    | 8.0      | $6.2 \pm 0.3$  | 8.3  | 9.5 max  | 3.4 | $0.65 \pm 0.1$ | 2.2 | $0.35^{+0.15}$  |
| F    | 8.0      | $10.2 \pm 0.3$ | 8.3  | 10.0 max | 3.4 | $0.90 \pm 0.2$ | 3.1 | $0.70 \pm 0.20$ |
| G    | 10.0     | $10.2 \pm 0.3$ | 10.3 | 12.0 max | 3.5 | $0.90 \pm 0.2$ | 4.6 | $0.70 \pm 0.20$ |

## 特性一览表

| 额定电压<br>(V.DC) | 静电容量<br>(±20%)<br>(μF) | 产品尺寸 (mm) |      | 尺寸*<br>代码 | 特性  |                               |              | 型号           | 回流   | 最少包装数量 |
|----------------|------------------------|-----------|------|-----------|---|-------------------------------|--------------|--------------|------|--------|
|                |                        | φD        | L    |           | 额定纹波电流<br>(120 Hz)<br>(+85 °C)<br>(mA r.m.s.) | tan δ<br>(120 Hz)<br>(+20 °C) | 耐久性<br>(小时)  |              |      |        |
| 6.3            | 22                     | 4         | 5.4  | B         | 29  | 0.30                          | 2000         | EEE0JA220AR  | (5)  | 2000   |
|                | 33                     | 4         | 5.4  | (B)       | 22  | 0.35                          | 1000         | EEE0JA330WAR | (5)  | 2000   |
|                | 47                     | 5         | 5.4  | C         | 46  | 0.30                          | 2000         | EEE0JA470AR  | (5)  | 1000   |
|                | 100                    | 5         | 5.4  | (C)       | 47  | 0.40                          | 1000         | EEE0JA101WAR | (5)  | 1000   |
|                |                        | 6.3       | 5.4  | D         | 71  | 0.30                          | 2000         | EEE0JA101AP  | (5)  | 1000   |
|                | 330                    | 6.3       | 7.7  | D8        | 188   | 0.30                          | 2000         | EEE0JA331XAP | (5)  | 900    |
|                |                        | 8         | 6.2  | E         | 300   | 0.35                          | 2000         | EEE0JA331AP  | (7)  | 1000   |
|                | 470                    | 8         | 10.2 | (F)       | 380   | 0.35                          | 1000         | EEE0JA471UAP | (7)  | 500    |
| 1000           | 10                     | 10.2      | G    | 700       | 0.35  | 2000                          | EEE0JA102AP  | (7)          | 500  |        |
| 1500           | 10                     | 10.2      | (G)  | 750       | 0.50  | 1000                          | EEE0JA152UAP | (7)          | 500  |        |
| 10             | 22                     | 4         | 5.4  | (B)       | 28  | 0.30                          | 1000         | EEE1AA220WAR | (5)  | 2000   |
|                | 33                     | 4         | 5.4  | (B)       | 29  | 0.30                          | 1000         | EEE1AA330WAR | (5)  | 2000   |
|                |                        | 5         | 5.4  | C         | 43  | 0.22                          | 2000         | EEE1AA330AR  | (5)  | 1000   |
|                | 47                     | 5         | 5.4  | (C)       | 47  | 0.30                          | 1000         | EEE1AA470WAR | (5)  | 1000   |
|                |                        | 5         | 5.4  | (C)       | 50  | 0.30                          | 1000         | EEE1AA101WAR | (5)  | 1000   |
|                | 100                    | 6.3       | 5.4  | D         | 70  | 0.26                          | 2000         | EEE1AA101AP  | (5)  | 1000   |
|                |                        | 6.3       | 7.7  | D8        | 173   | 0.22                          | 2000         | EEE1AA221XAP | (5)  | 900    |
|                | 220                    | 8         | 6.2  | E         | 250   | 0.26                          | 2000         | EEE1AA221AP  | (7)  | 1000   |
|                |                        | 8         | 10.2 | F         | 390   | 0.26                          | 2000         | EEE1AA331AP  | (7)  | 500    |
|                | 470                    | 8         | 10.2 | (F)       | 390   | 0.26                          | 1000         | EEE1AA471UAP | (7)  | 500    |
| 10             |                        | 10.2      | G    | 400       | 0.26  | 2000                          | EEE1AA471AP  | (7)          | 500  |        |
| 1000           | 10                     | 10.2      | (G)  | 580       | 0.35  | 1000                          | EEE1AA102UAP | (7)          | 500  |        |
| 16             | 10                     | 4         | 5.4  | B         | 28  | 0.16                          | 2000         | EEE1CA100AR  | (5)  | 2000   |
|                | 22                     | 4         | 5.4  | (B)       | 28  | 0.26                          | 1000         | EEE1CA220WAR | (5)  | 2000   |
|                |                        | 5         | 5.4  | C         | 39  | 0.16                          | 2000         | EEE1CA220AR  | (5)  | 1000   |
|                | 33                     | 5         | 5.4  | (C)       | 35  | 0.26                          | 1000         | EEE1CA330WAR | (5)  | 1000   |
|                |                        | 5         | 5.4  | (C)       | 39  | 0.26                          | 1000         | EEE1CA470WAR | (5)  | 1000   |
|                | 47                     | 6.3       | 5.4  | D         | 70  | 0.16                          | 2000         | EEE1CA470AP  | (5)  | 1000   |
|                |                        | 6.3       | 5.4  | (D)       | 70  | 0.26                          | 1000         | EEE1CA101WAP | (5)  | 1000   |
|                | 100                    | 8         | 6.2  | E         | 200   | 0.20                          | 2000         | EEE1CA101AP  | (7)  | 1000   |
|                |                        | 6.3       | 7.7  | D8        | 162   | 0.20                          | 2000         | EEE1CA221XAP | (5)  | 900    |
|                | 220                    | 8         | 10.2 | (F)       | 280   | 0.20                          | 1000         | EEE1CA221UAP | (7)  | 500    |
|                |                        | 8         | 10.2 | (F)       | 320   | 0.20                          | 1000         | EEE1CA331UAP | (7)  | 500    |
|                | 330                    | 10        | 10.2 | G         | 380   | 0.20                          | 2000         | EEE1CA331AP  | (7)  | 500    |
|                |                        | 8         | 10.2 | (F)       | 350   | 0.26                          | 1000         | EEE1CA471UAP | (7)  | 500    |
|                | 470                    | 10        | 10.2 | G         | 420   | 0.20                          | 2000         | EEE1CA471AP  | (7)  | 500    |
| 4.7            |                        | 4         | 5.4  | B         | 22  | 0.14                          | 2000         | EEE1EA4R7AR  | (5)  | 2000   |
| 10             | 4                      | 5.4       | (B)  | 22        | 0.20  | 1000                          | EEE1EA100WAR | (5)          | 2000 |        |
|                | 5                      | 5.4       | C    | 28        | 0.14  | 2000                          | EEE1EA100AR  | (5)          | 1000 |        |
| 22             | 5                      | 5.4       | (C)  | 35        | 0.20  | 1000                          | EEE1EA220WAR | (5)          | 1000 |        |
|                | 6.3                    | 5.4       | D    | 55        | 0.14  | 2000                          | EEE1EA220AP  | (5)          | 1000 |        |
| 33             | 5                      | 5.4       | (C)  | 42        | 0.20  | 1000                          | EEE1EA330WAR | (5)          | 1000 |        |
|                | 6.3                    | 5.4       | D    | 65        | 0.14  | 2000                          | EEE1EA330AP  | (5)          | 1000 |        |
| 47             | 6.3                    | 5.4       | (D)  | 70        | 0.20  | 1000                          | EEE1EA470WAP | (5)          | 1000 |        |
|                | 8                      | 6.2       | (E)  | 91        | 0.16  | 1000                          | EEE1EA101UAP | (7)          | 1000 |        |
| 100            | 6.3                    | 7.7       | D8   | 143       | 0.16  | 2000                          | EEE1EA101XAP | (5)          | 900  |        |
|                | 8                      | 10.2      | F    | 180       | 0.16  | 2000                          | EEE1EA101AP  | (7)          | 500  |        |
| 220            | 8                      | 10.2      | (F)  | 230       | 0.20  | 1000                          | EEE1EA221UAP | (7)          | 500  |        |
|                | 10                     | 10.2      | G    | 310       | 0.16  | 2000                          | EEE1EA221AP  | (7)          | 500  |        |
| 330            | 8                      | 10.2      | (F)  | 270       | 0.20  | 1000                          | EEE1EA331UAP | (7)          | 500  |        |
|                | 10                     | 10.2      | G    | 340       | 0.16  | 2000                          | EEE1EA331AP  | (7)          | 500  |        |
| 470            | 10                     | 10.2      | (G)  | 380       | 0.25  | 1000                          | EEE1EA471UAP | (7)          | 500  |        |

\* 尺寸代码 ( ) 为小型化品

· 关于回流焊保证条件, 编带包装规格, 请参照那个项目的页

· 耐振动品的编号, 末尾的包装记号: 成为 P → V

## 特性一览表

| 额定电压<br>(V.DC) | 静电容量<br>(±20 %)<br>(μF) | 产品尺寸 (mm) |      | 尺寸*<br>代码 | 特性  |                               |              | 型号           | 回流  | 最少包装数量        |
|----------------|-------------------------|-----------|------|-----------|---|-------------------------------|--------------|--------------|-----|---------------|
|                |                         | φD        | L    |           | 额定纹波电流<br>(120 Hz)<br>(+85 °C)<br>(mA r.m.s.) | tan δ<br>(120 Hz)<br>(+20 °C) | 耐久性<br>(小时)  |              |     | 带状包装<br>(pcs) |
| 35             | 4.7                     | 4         | 5.4  | B         | 22  | 0.12                          | 2000         | EEE1VA4R7AR  | (5) | 2000          |
|                | 10                      | 4         | 5.4  | (B)       | 22  | 0.16                          | 1000         | EEE1VA100WAR | (5) | 2000          |
|                |                         | 5         | 5.4  | C         | 30  | 0.12                          | 2000         | EEE1VA100AR  | (5) | 1000          |
|                | 22                      | 5         | 5.4  | (C)       | 36  | 0.16                          | 1000         | EEE1VA220WAR | (5) | 1000          |
|                |                         | 6.3       | 5.4  | D         | 60  | 0.12                          | 2000         | EEE1VA220AP  | (5) | 1000          |
|                | 33                      | 6.3       | 5.4  | (D)       | 60  | 0.16                          | 1000         | EEE1VA330WAP | (5) | 1000          |
|                |                         | 8         | 6.2  | E         | 130   | 0.14                          | 2000         | EEE1VA330AP  | (7) | 1000          |
|                | 47                      | 6.3       | 5.4  | (D)       | 70  | 0.16                          | 1000         | EEE1VA470WAP | (5) | 1000          |
|                |                         | 8         | 6.2  | E         | 165   | 0.14                          | 2000         | EEE1VA470AP  | (7) | 1000          |
|                | 100                     | 6.3       | 7.7  | D8        | 132   | 0.14                          | 2000         | EEE1VA101XAP | (5) | 900           |
|                |                         | 8         | 10.2 | (F)       | 140   | 0.14                          | 1000         | EEE1VA101UAP | (7) | 500           |
|                |                         | 10        | 10.2 | G         | 210   | 0.14                          | 2000         | EEE1VA101AP  | (7) | 500           |
|                | 220                     | 8         | 10.2 | (F)       | 200   | 0.14                          | 1000         | EEE1VA221UAP | (7) | 500           |
|                |                         | 10        | 10.2 | G         | 310   | 0.14                          | 2000         | EEE1VA221AP  | (7) | 500           |
| 330            | 10                      | 10.2      | (G)  | 350       | 0.30  | 1000                          | EEE1VA331UAP | (7)          | 500 |               |
| 50             | 1                       | 4         | 5.4  | B         | 10  | 0.12                          | 2000         | EEE1HA1R0AR  | (5) | 2000          |
|                | 2.2                     | 4         | 5.4  | B         | 16  | 0.12                          | 2000         | EEE1HA2R2AR  | (5) | 2000          |
|                | 3.3                     | 4         | 5.4  | B         | 16  | 0.12                          | 2000         | EEE1HA3R3AR  | (5) | 2000          |
|                | 4.7                     | 4         | 5.4  | (B)       | 18  | 0.14                          | 1000         | EEE1HA4R7WAR | (5) | 2000          |
|                |                         | 5         | 5.4  | C         | 23  | 0.12                          | 2000         | EEE1HA4R7AR  | (5) | 1000          |
|                | 10                      | 5         | 5.4  | (C)       | 27  | 0.14                          | 1000         | EEE1HA100WAR | (5) | 1000          |
|                |                         | 6.3       | 5.4  | D         | 35  | 0.12                          | 2000         | EEE1HA100AP  | (5) | 1000          |
|                | 22                      | 6.3       | 5.4  | (D)       | 40  | 0.14                          | 1000         | EEE1HA220WAP | (5) | 1000          |
|                |                         | 8         | 6.2  | E         | 120   | 0.12                          | 2000         | EEE1HA220AP  | (7) | 1000          |
|                | 33                      | 8         | 6.2  | (E)       | 65  | 0.12                          | 1000         | EEE1HA330UAP | (7) | 1000          |
|                |                         | 6.3       | 7.7  | D8        | 65  | 0.14                          | 2000         | EEE1HA330XAP | (5) | 900           |
|                |                         | 8         | 10.2 | F         | 110   | 0.12                          | 2000         | EEE1HA330AP  | (7) | 500           |
|                | 47                      | 6.3       | 7.7  | D8        | 105   | 0.14                          | 2000         | EEE1HA470XAP | (5) | 900           |
|                |                         | 8         | 10.2 | (F)       | 110   | 0.12                          | 1000         | EEE1HA470UAP | (7) | 500           |
| 10             |                         | 10.2      | G    | 130       | 0.12  | 2000                          | EEE1HA470AP  | (7)          | 500 |               |
| 100            | 8                       | 10.2      | (F)  | 200       | 0.18  | 1000                          | EEE1HA101UAP | (7)          | 500 |               |
|                | 10                      | 10.2      | G    | 250       | 0.12  | 2000                          | EEE1HA101AP  | (7)          | 500 |               |
| 220            | 10                      | 10.2      | (G)  | 300       | 0.18  | 1000                          | EEE1HA221UAP | (7)          | 500 |               |

\* 尺寸代码 ( ) 为小型化品

- 关于回流焊保证条件, 编带包装规格, 请参照那个项目的页
- 耐振动品的编号, 末尾的包装记号: 成为 P → V