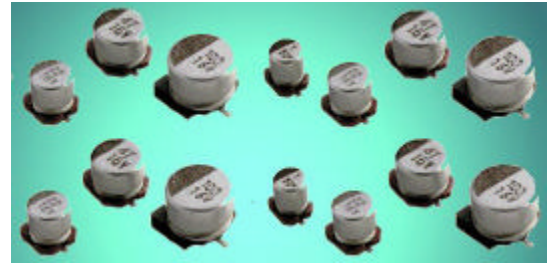


Surface mount aluminium electrolytic capacitors giving an excellent operational specification within a small package. The VE capacitors offer long life with an endurance test of 2000 hours at 85°C and are available in a wide range of values and voltages, which are listed on the opposite page. Supplied taped and reeled.

### Standard range

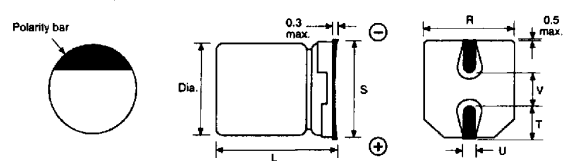
- Endurance 2000 hours at 85°C
- Excellent performance/size characteristics
- Suitable for wave & reflow soldering
- Capacitance tolerance  $\pm 20\%$
- Leakage Current  $\leq 0.01CV$
- Supplied taped & reeled



### Specification

Endurance test 2000 hours at 85°C  
 Capacitance tolerance  $\pm 20\%$  at 120Hz, 20°C  
 Ripple current (as listed) measured at 120Hz, 85°C  
 Operating temperature range -40°C to +85°C  
 Leakage current  $\leq 0.01CV$  or  $3\mu A$   
 (whichever is greater) after 2 min.

Dimensions (mm)



### Tan $\delta$ (max) at 120Hz, 20°C

| Rated voltage  | 4V   | 6.3V | 10V  | 16V  | 25V  | 35V  | 50V  | d.c. |
|----------------|------|------|------|------|------|------|------|------|
| All case sizes | 0.35 | 0.26 | 0.20 | 0.16 | 0.14 | 0.12 | 0.12 | d.c. |

| Case Size   | Dia. | L              | R    | S         | T   | U    | V   |
|-------------|------|----------------|------|-----------|-----|------|-----|
| 4.0 x 5.3   | 4.0  | $5.3 \pm 0.2$  | 4.3  | 5.5 max.  | 1.8 | 0.65 | 1.0 |
| 5.0 x 5.3   | 5.0  | $5.3 \pm 0.2$  | 5.3  | 6.5 max.  | 2.1 | 0.65 | 1.3 |
| 6.3 x 5.3   | 6.3  | $5.3 \pm 0.2$  | 6.6  | 7.8 max.  | 2.4 | 0.65 | 2.2 |
| 6.3 x 7.7   | 6.3  | $7.7 \pm 0.3$  | 6.6  | 7.8 max.  | 2.4 | 0.65 | 2.2 |
| 8.0 x 10.0  | 8.0  | $10.0 \pm 0.5$ | 8.4  | 10.0 max. | 3.3 | 0.9  | 3.1 |
| 10.0 x 10.0 | 10.0 | $10.0 \pm 0.5$ | 10.4 | 13.0 max. | 3.3 | 0.9  | 4.5 |

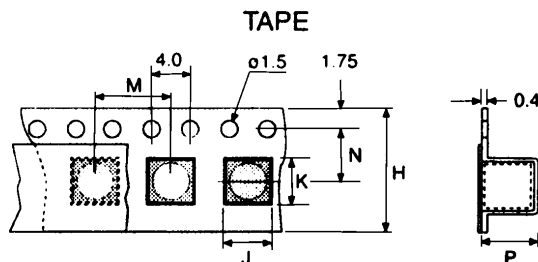
### Packaging

| Case Size   | H    | J    | K    | M    | N    | P    |
|-------------|------|------|------|------|------|------|
| 4.0 x 5.3   | 12.0 | 6.0  | 5.0  | 8.0  | 5.5  | 6.8  |
| 5.0 x 5.3   | 12.0 | 6.0  | 6.0  | 12.0 | 5.5  | 6.8  |
| 6.3 x 5.3   | 16.0 | 7.0  | 7.0  | 12.0 | 7.5  | 6.8  |
| 6.3 x 7.7   | 16.0 | 7.0  | 7.0  | 12.0 | 7.5  | 8.4  |
| 8.0 x 10.0  | 24.0 | 8.7  | 8.7  | 16.0 | 11.5 | 11.0 |
| 10.0 x 10.0 | 24.0 | 10.7 | 10.7 | 16.0 | 11.5 | 11.0 |

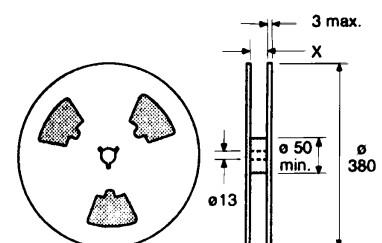
TAPE

| Case Size   | X  | Reel Qty. |
|-------------|----|-----------|
| 4.0 x 5.3   | 14 | 2000pcs   |
| 5.0 x 5.3   | 14 | 1000pcs   |
| 6.3 x 5.3   | 18 | 1000pcs   |
| 6.3 x 7.7   | 18 | 900pcs    |
| 8.0 x 10.0  | 26 | 500pcs    |
| 10.0 x 10.0 | 26 | 500pcs    |

REEL



REEL



### Marking

Printed on top surface of case, except case sizes 8.0 x 10.0 and 10.0 x 10.0 which are printed on case sleeve around the body.  
 Capacitance value, Voltage, Bar to indicate negative terminal

| Value<br>( $\mu$ F) | Ripple Current<br>(mA) | Case Size<br>Dia x L | KOME<br>Part no. | Order<br>code | SPLT<br>pcs |
|---------------------|------------------------|----------------------|------------------|---------------|-------------|
| <b>4 Volt</b>       |                        |                      |                  |               |             |
| 33                  | 26                     | 4.0 x 5.3            | KVE0G330MF1R     | KVG330        | 2000        |
| 47                  | 34                     | 4.0 x 5.3            | KVE0G470MF1R     | KVG470        | 2000        |
| 100                 | 61                     | 5.0 x 5.3            | KVE0G101MF2R     | KVG101        | 1000        |
| 220                 | 95                     | 6.3 x 5.3            | KVE0G221MF3R     | KVG221        | 1000        |
| 330                 | 102                    | 6.3 x 7.7            | KVE0G331MMR      | KVG331        | 900         |
| 470                 | 150                    | 6.3 x 7.7            | KVE0G471MMR      | KVG471        | 900         |
| <b>6.3Volt</b>      |                        |                      |                  |               |             |
| 22                  | 31                     | 4.0 x 5.3            | KVE0J220MF1R     | KVJ220        | 2000        |
| 33                  | 39                     | 5.0 x 5.3            | KVE0J330MF2R     | KVJ330        | 1000        |
| 47                  | 47                     | 5.0 x 5.3            | KVE0J470MF2R     | KVJ470        | 1000        |
| 100                 | 71                     | 6.3 x 5.3            | KVE0J101MF3R     | KVJ101        | 1000        |
| 220                 | 95                     | 6.3 x 7.7            | KVE0J221MMR      | KVJ221        | 900         |
| 330                 | 150                    | 6.3 x 7.7            | KVE0J331MMR      | KVJ331        | 900         |
| 470                 | 300                    | 8.0 x 10.0           | KVE0J471MF4R     | KVJ471        | 500         |
| 1000                | 330                    | 10.0 x 10.0          | KVE0J102MF5R     | KVJ102        | 500         |
| <b>10 Volt</b>      |                        |                      |                  |               |             |
| 22                  | 35                     | 5.0 x 5.3            | KVE1A220MF2R     | KVA220        | 1000        |
| 33                  | 43                     | 5.0 x 5.3            | KVE1A330MF2R     | KVA330        | 1000        |
| 47                  | 59                     | 6.3 x 5.3            | KVE1A470MF3R     | KVA470        | 1000        |
| 100                 | 76                     | 6.3 x 5.3            | KVE1A101MF3R     | KVA101        | 1000        |
| 220                 | 150                    | 6.3 x 7.7            | KVE1A221MMR      | KVA221        | 900         |
| 330                 | 280                    | 8.0 x 10.0           | KVE1A331MF4R     | KVA331        | 500         |
| 470                 | 300                    | 8.0 x 10.0           | KVE1A471MF4R     | KVA471        | 500         |
| <b>16 Volt</b>      |                        |                      |                  |               |             |
| 10                  | 25                     | 4.0 x 5.3            | KVE1C100MF1R     | KVC100        | 2000        |
| 22                  | 39                     | 5.0 x 5.3            | KVE1C220MF2R     | KVC220        | 1000        |
| 33                  | 57                     | 6.3 x 5.3            | KVE1C330MF3R     | KVC330        | 1000        |
| 47                  | 68                     | 6.3 x 5.3            | KVE1C470MF3R     | KVC470        | 1000        |
| 100                 | 86                     | 6.3 x 5.3            | KVE1C101MF3R     | KVC101        | 1000        |
| 220                 | 150                    | 6.3 x 7.7            | KVE1C221MMR      | KVC221        | 900         |
| 330                 | 280                    | 8.0 x 10.0           | KVE1C331MF4R     | KVC331        | 500         |
| 470                 | 330                    | 10.0 x 10.0          | KVE1C471MF5R     | KVC471        | 500         |
| <b>25 Volt</b>      |                        |                      |                  |               |             |
| 4.7                 | 19                     | 4.0 x 5.3            | KVE1E4R7MF1R     | KVE4R7        | 2000        |
| 10                  | 26                     | 5.0 x 5.3            | KVE1E100MF2R     | KVE100        | 1000        |
| 22                  | 52                     | 6.3 x 5.3            | KVE1E220MF3R     | KVE220        | 1000        |
| 33                  | 63                     | 6.3 x 5.3            | KVE1E330MF3R     | KVE330        | 1000        |
| 47                  | 68                     | 6.3 x 5.3            | KVE1E470MF3R     | KVE470        | 1000        |
| 100                 | 130                    | 6.3 x 7.7            | KVE1E101MMR      | KVE101        | 900         |
| 220                 | 250                    | 8.0 x 10.0           | KVE1E221MF4R     | KVE221        | 500         |
| 330                 | 310                    | 10.0 x 10.0          | KVE1E331MF4R     | KVE331        | 500         |
| <b>35 Volt</b>      |                        |                      |                  |               |             |
| 4.7                 | 20                     | 4.0 x 5.3            | KVE1V4R7MF1R     | KVX4R7        | 2000        |
| 10                  | 30                     | 5.0 x 5.3            | KVE1V100MF2R     | KVX100        | 1000        |
| 22                  | 54                     | 6.3 x 5.3            | KVE1V220MF3R     | KVX220        | 1000        |
| 33                  | 60                     | 6.3 x 5.3            | KVE1V330MF3R     | KVX330        | 1000        |
| 47                  | 70                     | 6.3 x 5.3            | KVE1V470MF3R     | KVX470        | 1000        |
| 100                 | 120                    | 6.3 x 7.7            | KVE1V101MMR      | KVX101        | 900         |
| 220                 | 270                    | 10.0 x 10.0          | KVE1V221MF5R     | KVX221        | 500         |
| <b>50 Volt</b>      |                        |                      |                  |               |             |
| 0.10                | 1.0                    | 4.0 x 5.3            | KVE1H0R1MF1R     | KVH0R1        | 2000        |
| 0.22                | 2.3                    | 4.0 x 5.3            | KVE1HR22MF1R     | KVHR22        | 2000        |
| 0.33                | 3.5                    | 4.0 x 5.3            | KVE1HR33MF1R     | KVHR33        | 2000        |
| 0.47                | 5.0                    | 4.0 x 5.3            | KVE1HR47MF1R     | KVHR47        | 2000        |
| 1.0                 | 10                     | 4.0 x 5.3            | KVE1H1R0MF1R     | KVH1R0        | 2000        |
| 2.2                 | 15                     | 4.0 x 5.3            | KVE1H2R2MF1R     | KVH2R2        | 2000        |
| 3.3                 | 18                     | 4.0 x 5.3            | KVE1H3R3MF1R     | KVH3R3        | 2000        |
| 4.7                 | 23                     | 5.0 x 5.3            | KVE1H4R7MF2R     | KVH4R7        | 1000        |
| 10                  | 34                     | 6.3 x 5.3            | KVE1H100MF3R     | KVH100        | 1000        |
| 22                  | 45                     | 6.3 x 5.3            | KVE1H220MF3R     | KVH220        | 1000        |
| 33                  | 85                     | 6.3 x 7.7            | KVE1H330MMR      | KVH330        | 900         |
| 47                  | 90                     | 6.3 x 7.7            | KVE1H470MMR      | KVH470        | 900         |
| 100                 | 200                    | 8.0 x 10.0           | KVE1H101MF4R     | KVH101        | 500         |