

# LELON SMD Aluminum Electrolytic Capacitors

RoHS Compliant This product is RoHS compliant.



## VZH 105°C ULTRA LOW IMPEDANCE SERIES (CONT.)

### Specifications:

- Operating Temperature Range: 6.3 ~ 63V: - 55°C to + 105°C  
80 ~ 100V: - 40°C to + 105°C
- Voltage Range: 6.3V ~ 100V
- Capacitance Tolerance: ± 20% @120Hz, 20°C
- Endurance: 2000 to 5000 hours @ 105°C
- Leakage Current: 0.01CV or 3µA whichever is greater after 2 minutes of rated voltage (at 20°C)

### Features:

- Designed for surface mounting on high density PC board
- Ultra Low Impedance
- Large capacitance V-Chip Capacitor

### Application Note:

- A higher voltage capacitor may be used in a lower voltage application
- Parts Available on Reels



RoHS Compliant



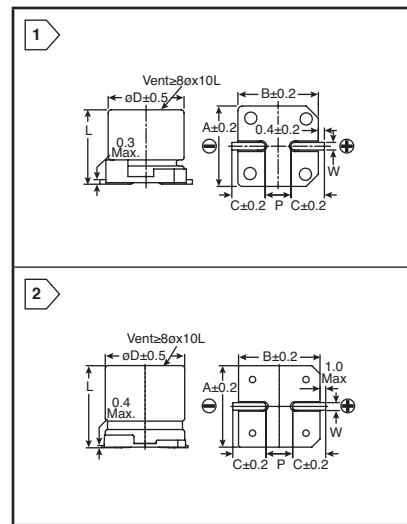
For quantities greater than listed, call for quote.

| MOUSER STOCK NO.    | Lelon Part No.    | Value (µF) | Case Size (DxL mm) | Impedance (Ω) 100kHz, 20°C | Ripple (mA/5ms) | Price Each |      |      |
|---------------------|-------------------|------------|--------------------|----------------------------|-----------------|------------|------|------|
|                     |                   |            |                    |                            |                 | 1          | 100  | 500  |
| <b>50 Volts</b>     |                   |            |                    |                            |                 |            |      |      |
| 140-VZH010M1HTR0406 | VZH-010M1HTR-0406 | 1          | 4 x 5.7            | 2.9                        | 60              | .21        | .162 | .087 |
| 140-VZH2R2M1HTR0406 | VZH-2R2M1HTR-0406 | 2.2        | 4 x 5.7            | 2.9                        | 60              | .21        | .162 | .087 |
| 140-VZH3R3M1HTR0406 | VZH-3R3M1HTR-0406 | 3.3        | 4 x 5.7            | 2.9                        | 60              | .21        | .162 | .087 |
| 140-VZH4R7M1HTR0506 | VZH-4R7M1HTR-0506 | 4.7        | 5 x 5.7            | 1.52                       | 85              | .23        | .187 | .099 |
| 140-VZH100M1HTR0606 | VZH-100M1HTR-0606 | 10         | 6.3 x 5.7          | .88                        | 165             | .27        | .225 | .112 |
| 140-VZH220M1HTR0606 | VZH-220M1HTR-0606 | 22         | 6.3 x 5.7          | .88                        | 165             | .27        | .225 | .112 |
| 140-VZH330M1HTR0607 | VZH-330M1HTR-0607 | 33         | 6.3 x 7.7          | .68                        | 185             | .29        | .237 | .124 |
| 140-VZH470M1HTR0607 | VZH-470M1HTR-0607 | 47         | 6.3 x 7.7          | .68                        | 185             | .31        | .25  | .137 |
| 140-VZH680M1HTR0810 | VZH-680M1HTR-0810 | 68         | 8 x 10             | .34                        | 369             | .56        | .449 | .237 |
| 140-VZH101M1HTR0810 | VZH-101M1HTR-0810 | 100        | 8 x 10             | .34                        | 369             | .58        | .462 | .25  |
| 140-VZH101M1HTR1010 | VZH-101M1HTR-1010 | 100        | 10 x 10            | .18                        | 553             | .86        | .66  | .49  |
| 140-VZH151M1HTR1010 | VZH-151M1HTR-1010 | 150        | 10 x 10.3          | .18                        | 553             | .82        | .662 | .349 |
| 140-VZH221M1HTR1010 | VZH-221M1HTR-1010 | 220        | 10 x 10.3          | .18                        | 553             | .92        | .737 | .387 |
| 140-VZH331M1HTR1313 | VZH-331M1HTR-1313 | 330        | 12.5 x 13.5        | .12                        | 630             | 1.66       | 1.33 | .70  |
| 140-VZH471M1HTR1616 | VZH-471M1HTR-1616 | 470        | 16 x 16.5          | .073                       | 1000            | 2.41       | 1.93 | 1.01 |
| 140-VZH681M1HTR1616 | VZH-681M1HTR-1616 | 680        | 16 x 16.5          | .073                       | 1000            | 2.57       | 2.04 | 1.08 |
| <b>63 Volts</b>     |                   |            |                    |                            |                 |            |      |      |
| 140-VZH4R7M1JTR0506 | VZH-4R7M1JTR-0506 | 4.7        | 5 x 5.7            | 1.9                        | 70              | .23        | .187 | .099 |
| 140-VZH100M1JTR0606 | VZH-100M1JTR-0606 | 10         | 6.3 x 5.7          | 1.2                        | 130             | .27        | .225 | .112 |
| 140-VZH220M1JTR0607 | VZH-220M1JTR-0607 | 22         | 6.3 x 7.7          | .90                        | 150             | .31        | .249 | .124 |
| 140-VZH330M1JTR0810 | VZH-330M1JTR-0810 | 33         | 8 x 10             | .50                        | 280             | .56        | .449 | .237 |
| 140-VZH470M1JTR0810 | VZH-470M1JTR-0810 | 47         | 8 x 10             | .50                        | 280             | .56        | .449 | .237 |
| 140-VZH101M1JTR1010 | VZH-101M1JTR-1010 | 100        | 10 x 10            | .25                        | 450             | .85        | .675 | .362 |
| 140-VZH151M1JTR1313 | VZH-151M1JTR-1313 | 150        | 12.5 x 13.5        | .15                        | 700             | 1.47       | 1.18 | .625 |
| 140-VZH221M1JTR1313 | VZH-221M1JTR-1313 | 220        | 12.5 x 13.5        | .15                        | 700             | 1.59       | 1.28 | .674 |
| 140-VZH331M1JTR1616 | VZH-331M1JTR-1616 | 330        | 16 x 16.5          | .082                       | 900             | 2.51       | 2.01 | 1.06 |
| 140-VZH471M1JTR1616 | VZH-471M1JTR-1616 | 470        | 16 x 16.5          | .082                       | 900             | 2.57       | 2.04 | 1.08 |
| <b>80 Volts</b>     |                   |            |                    |                            |                 |            |      |      |
| 140-VZH470M1KTR1010 | VZH-470M1KTR-1010 | 47         | 10 x 10            | .70                        | 200             | .85        | .60  | .30  |
| 140-VZH101M1KTR1010 | VZH-101M1KTR-1010 | 100        | 10 x 10.3          | .70                        | 200             | .91        | .65  | .325 |
| 140-VZH151M1KTR1313 | VZH-151M1KTR-1313 | 150        | 12.5 x 13.5        | .32                        | 450             | 1.51       | 1.06 | .537 |
| 140-VZH221M1KTR1316 | VZH-221M1KTR-1316 | 220        | 12.5 x 16          | .26                        | 550             | 1.66       | 1.17 | .587 |
| 140-VZH331M1KTR1616 | VZH-331M1KTR-1616 | 330        | 16 x 16.5          | .17                        | 650             | 2.57       | 1.81 | .912 |
| <b>100 Volts</b>    |                   |            |                    |                            |                 |            |      |      |
| 140-VZH470M2ATR1010 | VZH-470M2ATR-1010 | 47         | 10 x 10            | .70                        | 200             | .80        | .387 | .337 |
| 140-VZH101M2ATR1313 | VZH-101M2ATR-1313 | 100        | 12.5 x 13.5        | .32                        | 450             | 1.45       | .70  | .612 |
| 140-VZH151M2ATR1316 | VZH-151M2ATR-1316 | 150        | 12.5 x 16          | .26                        | 550             | 2.03       | .987 | .862 |

### Lead Spacing and Diameter

Unit:mm

| øD   | L        | A    | B    | C   | W       | P±0.2 | Fig. No. |
|------|----------|------|------|-----|---------|-------|----------|
| 4    | 5.7±0.3  | 4.3  | 4.3  | 2.0 | 0.5-0.8 | 1.0   | 1        |
| 5    | 5.7±0.3  | 5.3  | 5.3  | 2.3 | 0.5-0.8 | 1.5   | 1        |
| 6.3  | 5.7±0.3  | 6.6  | 6.6  | 2.7 | 0.5-0.8 | 2.0   | 1        |
| 8    | 7.7±0.3  | 6.6  | 6.6  | 2.7 | 0.5-0.8 | 3.1   | 1        |
| 10   | 10±0.5   | 8.4  | 8.4  | 3.0 | 0.7-1.1 | 3.1   | 1        |
| 8    | 10.3±0.5 | 8.4  | 8.4  | 3.0 | 0.7-1.1 | 4.7   | 1        |
| 10   | 10±0.5   | 10.4 | 10.4 | 3.3 | 0.7-1.1 | 4.7   | 1        |
| 10   | 10.3±0.5 | 10.4 | 10.4 | 3.3 | 0.7-1.1 | 4.7   | 1        |
| 12.5 | 13.5±0.5 | 13.0 | 13.0 | 4.8 | 1.1-1.4 | 4.4   | 2        |
| 12.5 | 16±0.5   | 13.0 | 13.0 | 4.8 | 1.1-1.4 | 4.4   | 2        |
| 16   | 16.5±0.5 | 17.0 | 17.0 | 5.8 | 1.1-1.4 | 6.4   | 2        |



Aluminum Caps, SMD

Lelon

## VES 105°C 5.5MM SMD SERIES

### Specifications:

- Operating Temperature Range: - 55°C to + 105°C
- Voltage Range: 6.3V ~ 50V
- Capacitance Tolerance: ± 20% @120Hz, 20°C
- Endurance: 1000 hours @ 105°C
- Leakage Current: 0.01CV or 3µA whichever is greater after 2 minutes of rated voltage (at 20°C)

### Features:

- Designed for surface mounting on high density PC board
- Vertical Chip type with 5.5mm height

### Application Note:

- A higher voltage capacitor may be used in a lower voltage application
- Parts Available on Reels



RoHS Compliant



For quantities greater than listed, call for quote.

| MOUSER STOCK NO.    | Lelon Part No.    | Voltage (DC) | Voltage (DC) | Case Size (DxL mm) | Ripple Current | Price Each |      |      |      |
|---------------------|-------------------|--------------|--------------|--------------------|----------------|------------|------|------|------|
|                     |                   |              |              |                    |                | 1          | 100  | 500  | 1000 |
| 140-VES220M0JTR0405 | VES-220M0JTR-0405 | 6.3          | 22           | 4 x 5.3            | 21             | .86        | .602 | .465 | .359 |
| 140-VES330M0JTR0505 | VES-330M0JTR-0505 | 6.3          | 33           | 5 x 5.3            | 30             | .22        | .162 | .137 | .082 |
| 140-VES470M0JTR0505 | VES-470M0JTR-0505 | 6.3          | 47           | 5 x 5.3            | 36             | .23        | .162 | .137 | .084 |
| 140-VES101M0JTR0605 | VES-101M0JTR-0605 | 6.3          | 100          | 6.3 x 5.3          | 61             | .26        | .175 | .15  | .092 |
| 140-VES100M1ATR0405 | VES-100M1ATR-0405 | 10           | 10           | 4 x 5.3            | 15             | .20        | .137 | .112 | .072 |
| 140-VES220M1ATR0505 | VES-220M1ATR-0505 | 10           | 22           | 5 x 5.3            | 25             | .23        | .162 | .137 | .084 |
| 140-VES330M1ATR0505 | VES-330M1ATR-0505 | 10           | 33           | 5 x 5.3            | 31             | .23        | .162 | .137 | .084 |
| 140-VES470M1ATR0605 | VES-470M1ATR-0605 | 10           | 47           | 6.3 x 5.3          | 43             | .26        | .187 | .15  | .096 |
| 140-VES101M1ATR0605 | VES-101M1ATR-0605 | 10           | 100          | 6.3 x 5.3          | 65             | .27        | .187 | .162 | .097 |
| 140-VES100M1CTR0405 | VES-100M1CTR-0405 | 16           | 10           | 4 x 5.3            | 16             | .17        | .087 | .075 | .057 |
| 140-VES220M1CTR0505 | VES-220M1CTR-0505 | 16           | 22           | 5 x 5.3            | 28             | .21        | .099 | .087 | .067 |
| 140-VES330M1CTR0605 | VES-330M1CTR-0605 | 16           | 33           | 6.3 x 5.3          | 40             | .23        | .112 | .10  | .077 |
| 140-VES470M1CTR0605 | VES-470M1CTR-0605 | 16           | 47           | 6.3 x 5.3          | 47             | .23        | .112 | .10  | .077 |
| 140-VES101M1CTR0605 | VES-101M1CTR-0605 | 16           | 100          | 6.3 x 5.3          | 70             | .25        | .125 | .10  | .081 |
| 140-VES4R7M1ETR0405 | VES-4R7M1ETR-0405 | 25           | 4.7          | 4 x 5.3            | 12             | .20        | .137 | .112 | .072 |
| 140-VES100M1ETR0505 | VES-100M1ETR-0505 | 25           | 10           | 5 x 5.3            | 21             | .22        | .162 | .137 | .082 |
| 140-VES220M1ETR0605 | VES-220M1ETR-0605 | 25           | 22           | 6.3 x 5.3          | 36             | .26        | .187 | .15  | .096 |
| 140-VES330M1ETR0605 | VES-330M1ETR-0605 | 25           | 33           | 6.3 x 5.3          | 44             | .27        | .187 | .162 | .097 |
| 140-VES470M1ETR0605 | VES-470M1ETR-0605 | 25           | 47           | 6.3 x 5.3          | 60             | .28        | .187 | .162 | .101 |
| 140-VES4R7M1VTR0405 | VES-4R7M1VTR-0405 | 35           | 4.7          | 4 x 5.3            | 14             | .16        | .10  | .075 | .061 |
| 140-VES100M1VTR0505 | VES-100M1VTR-0505 | 35           | 10           | 5 x 5.3            | 23             | .18        | .125 | .087 | .07  |
| 140-VES220M1VTR0605 | VES-220M1VTR-0605 | 35           | 22           | 6.3 x 5.3          | 50             | .22        | .137 | .112 | .082 |
| 140-VES0R1M1HTR0405 | VES-0R1M1HTR-0405 | 50           | .1           | 4 x 5.3            | 2              | .17        | .137 | .112 | .087 |
| 140-VESR22M1HTR0405 | VES-R22M1HTR-0405 | 50           | .22          | 4 x 5.3            | 3              | .17        | .137 | .112 | .087 |
| 140-VESR33M1HTR0405 | VES-R33M1HTR-0405 | 50           | .33          | 4 x 5.3            | 4              | .17        | .137 | .112 | .087 |
| 140-VESR47M1HTR0405 | VES-R47M1HTR-0405 | 50           | .47          | 4 x 5.3            | 5              | .17        | .137 | .112 | .087 |
| 140-VES010M1HTR0405 | VES-010M1HTR-0405 | 50           | 1.0          | 4 x 5.3            | 7              | .17        | .137 | .112 | .087 |
| 140-VES2R2M1HTR0405 | VES-2R2M1HTR-0405 | 50           | 2.2          | 4 x 5.3            | 10             | .17        | .137 | .112 | .087 |
| 140-VES3R3M1HTR0405 | VES-3R3M1HTR-0405 | 50           | 3.3          | 4 x 5.3            | 12             | .17        | .137 | .112 | .087 |
| 140-VES4R7M1HTR0405 | VES-4R7M1HTR-0405 | 50           | 4.7          | 4 x 5.3            | 17             | .17        | .137 | .112 | .087 |
| 140-VES100M1HTR0605 | VES-100M1HTR-0605 | 50           | 10           | 6.3 x 5.3          | 26             | .23        | .187 | .15  | .118 |
| 140-VES220M1HTR0605 | VES-220M1HTR-0605 | 50           | 22           | 6.3 x 5.3          | 51             | .23        | .187 | .15  | .12  |

### Lead Spacing and Diameter

Unit:mm

| øD  | L       | A   | B   | C   | W       | P±0.2 |
|-----|---------|-----|-----|-----|---------|-------|
| 4   | 5.3±0.2 | 4.3 | 4.3 | 2.0 | 0.5-0.8 | 1.0   |
| 5   | 5.3±0.2 | 5.3 | 5.3 | 2.3 | 0.5-0.8 | 1.5   |
| 6.3 | 5.3±0.2 | 6.6 | 6.6 | 2.7 | 0.5-0.8 | 2.0   |

