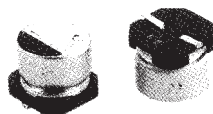


### FEATURES

- 105°C, 2000 hours assured.
- Vertical chip type miniaturized for 6.0mm
- Replaces RVL Series
- RoHS Compliant



### SPECIFICATIONS

|                                                  |                                                                                                                    |                                                           |      |      |      |        |      |                                                               |    |  |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|------|------|------|--------|------|---------------------------------------------------------------|----|--|
| Item                                             | Performance                                                                                                        |                                                           |      |      |      |        |      |                                                               |    |  |
| Operating Temp. Range                            | -55°C ~ + 105°C                                                                                                    |                                                           |      |      |      |        |      |                                                               |    |  |
| Capacitance Tolerance                            | ± 20% (120Hz, 20°C)                                                                                                |                                                           |      |      |      |        |      |                                                               |    |  |
| Leakage Current<br>(at 20°C)                     | I = 0.01CV OR 3 A (whichever is greater) after 2 minutes, where C = rated capacitance in F V=rated DC voltage in V |                                                           |      |      |      |        |      |                                                               |    |  |
| Dissipation Factor<br>Tan δ at 120 Hz, 20°C      | Rated Voltage                                                                                                      | 6.3                                                       | 10   | 16   | 25   | 35     | 50   |                                                               |    |  |
|                                                  | Tan δ (max)                                                                                                        | 0.32                                                      | 0.28 | 0.24 | 0.18 | 0.15   | 0.14 |                                                               |    |  |
| Low Temperature<br>Characteristics<br>(at 120Hz) | Rated Voltage                                                                                                      |                                                           |      | 6.3  | 10   | 16     | 25   | 35                                                            | 50 |  |
|                                                  | Impedance Ratio                                                                                                    | Z(-25°C) /Z(+20°C)                                        |      | 4    | 3    | 2      | 2    | 2                                                             | 2  |  |
|                                                  |                                                                                                                    | Z(-40°C) /Z(+20°C)                                        |      | 8    | 5    | 4      | 3    | 3                                                             | 3  |  |
| Life Test                                        | Test Time                                                                                                          | Load Life                                                 |      |      |      |        |      | Shelf Life                                                    |    |  |
|                                                  |                                                                                                                    | 2000 Hrs                                                  |      |      |      |        |      | 1000 Hrs                                                      |    |  |
|                                                  | Capacitance Change                                                                                                 | Within ± 30% of initial value                             |      |      |      |        |      | Within ± 30% of initial value                                 |    |  |
|                                                  | Dissipation Factor                                                                                                 | Less than 300% of specified value                         |      |      |      |        |      | Less than 300% of specified value                             |    |  |
|                                                  | Leakage Current                                                                                                    | Within specified value                                    |      |      |      |        |      | Within specified value                                        |    |  |
|                                                  | Test Conditions                                                                                                    | 20°C (after rated voltage applied for 2000 hours at 105°C |      |      |      |        |      | 20° C (after storage for 1000 hours At 105°C Without voltage) |    |  |
| Ripple Current &<br>Frequency Multipliers        | VDC(V) \ Freq. (Hz)                                                                                                |                                                           | 50   | 120  | 1K   | 10K up |      |                                                               |    |  |
|                                                  | Under 16                                                                                                           |                                                           | 0.80 | 1.00 | 1.15 | 1.25   |      |                                                               |    |  |
|                                                  | 25 ~ 35                                                                                                            |                                                           | 0.80 | 1.00 | 1.25 | 1.40   |      |                                                               |    |  |
|                                                  | 50                                                                                                                 | 0.1~0.33μF                                                | 0.50 | 1.00 | 1.35 | 1.50   |      |                                                               |    |  |
|                                                  |                                                                                                                    | 4.7~10μF                                                  | 0.70 | 1.00 | 1.35 | 1.50   |      |                                                               |    |  |
| Standards                                        | JIS C 5101-18-1                                                                                                    |                                                           |      |      |      |        |      |                                                               |    |  |

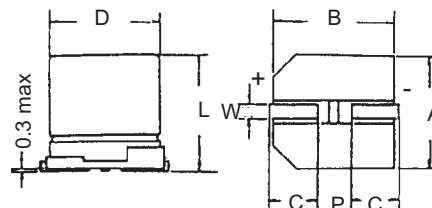
### DIMENSION & PERMISSIBLE RIPPLE CURRENT

Ripple Current mA/rms at 120 Hz, 105°C

| VDC           |          | 6.3V(0J)  |    | 10V(1A)   |    | 16V(1C)   |    | 25V(1E)   |    | 35V(1V)   |    | 50V(1H)   |    |
|---------------|----------|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|
| $\mu\text{F}$ | Contents | DxL       | mA | DxL       | mA | DxL       | mA | DxL       | mA | DxL       | mA | DxL       | mA |
| 0.1           | 0R1      |           |    |           |    |           |    |           |    |           |    | 4 x 5.7   | 2  |
| 0.22          | R22      |           |    |           |    |           |    |           |    |           |    | 4 x 5.7   | 3  |
| 0.33          | R33      |           |    |           |    |           |    |           |    |           |    | 4 x 5.7   | 4  |
| 0.47          | R47      |           |    |           |    |           |    |           |    |           |    | 4 x 5.7   | 5  |
| 1.0           | 010      |           |    |           |    |           |    |           |    |           |    | 4 x 5.7   | 10 |
| 2.2           | 2R2      |           |    |           |    |           |    |           |    |           |    | 4 x 5.7   | 16 |
| 3.3           | 3R3      |           |    |           |    |           |    |           |    |           |    | 4 x 5.7   | 18 |
| 4.7           | 4R7      |           |    |           |    |           |    | 4 x 5.7   | 13 | 4 x 5.7   | 15 | 5 x 5.7   | 22 |
| 10            | 100      |           |    |           |    | 4 x 5.7   | 16 | 5 x 5.7   | 23 | 5 x 5.7   | 25 | 6.3 x 5.7 | 30 |
| 22            | 220      |           |    |           |    | 5 x 5.7   | 30 | 6.3 x 5.7 | 38 | 6.3 x 5.7 | 50 |           |    |
| 33            | 330      |           |    |           |    | 6.3 x 5.7 | 40 | 6.3 x 5.7 | 48 |           |    |           |    |
| 47            | 470      |           |    | 6.3 x 5.7 | 43 | 6.3 x 5.7 | 50 | 6.3 x 5.7 | 56 |           |    |           |    |
| 100           | 101      | 6.3 x 5.7 | 61 |           |    |           |    |           |    |           |    |           |    |

### PAD SPACING AND DIAMETER

| D±0.5 | L       | A±0.2 | B±0.2 | C±0.2 | W          | P±0.2 |
|-------|---------|-------|-------|-------|------------|-------|
| 4     | 5.7±0.3 | 4.3   | 4.3   | 2.0   | 0.5 to 0.8 | 1.0   |
| 5     | 5.7±0.3 | 5.3   | 5.3   | 2.3   | 0.5 to 0.8 | 1.5   |
| 6.3   | 5.7±0.3 | 6.3   | 6.3   | 2.7   | 0.5 to 0.8 | 2.0   |



### PART NUMBER EXAMPLE

VEL 100 M 1C TR 040 057