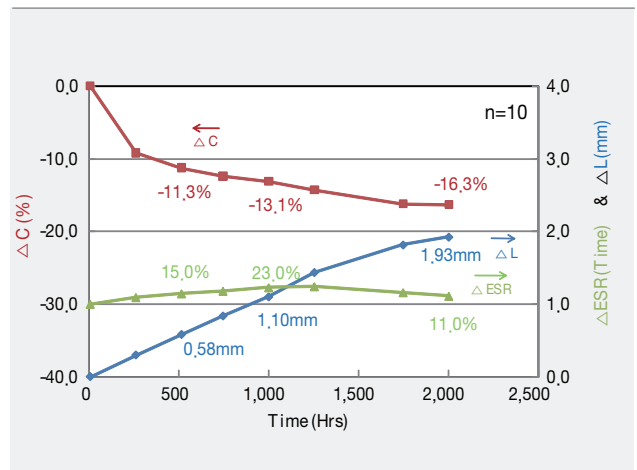


## Improve reliability : Higher energy density + Effective sizing

### HIGH TEMP. RELIABILITY RESULTS AT 3V RATED



#### FEATURES

- Rated 3V
- Operating temperature -40 to +65°C
- High power density and ultra low ESR

#### ADVANTAGES

- Energy density increase by 40% : Dimension 40% down
- Higher reliability at the same condition (compared with 2.5V)

### AMR & INDUSTRIAL APPLICATIONS

#### Power backup

- No maintenance
- Wider temperature : -40 to +65(70)°C
- Higher reliability by increased voltage buffer, offering longer life (compared with 2.5V, 2.7V supercaps)



## SPECIFICATIONS

ITEM		CHARACTERISTICS
Rated Voltage ( $V_R$ )		3 V
Operating Temperature		- 40 ~ +65°C
Capacitance Tolerance		-10 ~ +30%
High Temperature Load Life	Measure	After 1,000 hours at 3V loaded under +65°C, capacitors meet the following criteria.
	$\Delta C$	$\leq 30\%$ of initial value
	ESR	$\leq 2$ times of specified value
Temperature Characteristics	Measure	at -40, +25, +65°C
	$\Delta C$	$\leq 5\%$ of initial value
	ESR	$\leq 2$ times of specified value
Cycle Life Characteristics	Cycle	500,000
	$\Delta C$	$\leq 30\%$ of initial value
	ESR	$\leq 2$ times of specified value
	Method	Cycle of Charge/discharge from $V_R$ to $1/2V_R$
Shelf Life		After 1,000 hour storage under +65°C without load, capacitors meet the criteria of high temp. load life above.

## SPECIFICATIONS

PART NUMBER	Rated Voltage (V)	Capacitance (F)	ESR (mΩ)		Leakage Current (mA, 72hr)	Size (mm) D × L	Weight (g)	Volume (ml)	Energy Density (Wh/L)	
			AC(1KHz)	DC						
Lead	3	VEC 3R0 305 QG	3	50	65	0.010	08 × 20	1.4	1.0	3.8
		VEC 3R0 505 QG	5	35	45	0.014	10 × 20	2.1	1.6	3.9
		VEC 3R0 106 QG	10	20	26	0.036	10 × 30	3.0	2.4	5.2
		VEC 3R0 256 QG	25	15	20	0.082	16 × 25	6.8	5.0	6.3
		VEC 3R0 506 QG	50	10	15	0.126	18 × 40	11.3	10.2	6.1
2Pin Lug		VEC 3R0 107 QG	100	6	8	0.600	22 × 45	19.7	17.1	7.3
4Pin Lug		VEC 3R0 357 QG	350	3	3.5	1.680	35 × 60	54.1	57.7	7.58

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