

## Chip Type, 125°C Use, Low ESR, Long Life Capacitors

GREEN CAP

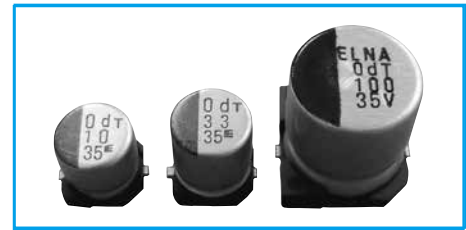
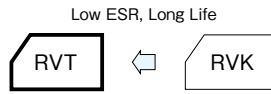
SMD

Low ESR

125°C  
2000hours

Anti-cleaning solvent

- Compatible with surface mounting.
- Supplied with carrier taping.
- Guarantees 2000 hours at 125°C.  
( $\phi 4$  to  $\phi 8 \times 6.5L$  : 1000 hours)  
( $\phi 12.5 \times 13.5L$  : 5000 hours)



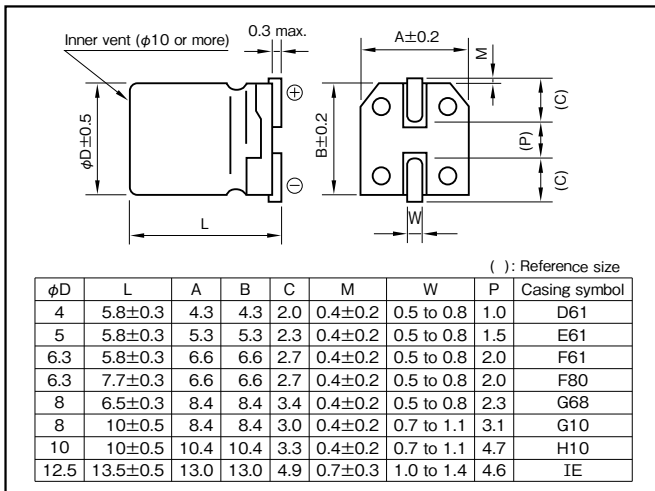
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### Specifications

Item	Performance										
Category temperature range (°C)	-40 to +125										
Tolerance at rated capacitance (%)	±20 (20°C, 120Hz)										
Leakage current (µA)	Less than 0.01CV or 3 whichever is larger (after 2 minutes) C : Rated capacitance (µF) ; V : Rated voltage (V) (20°C)										
Tangent of loss angle	Rated voltage (V)	10	16	25	35	50	63	80	100		
	Tangent of loss angle	0.24	0.20	0.16	0.14	0.14	0.12	0.12	0.10	(20°C, 120Hz)	
Characteristics at high and low temperature	Impedance Ratio (max.)	Rated voltage (V)		10	16	25	35	50	63	80	100
		Z-25°C/Z+20°C	3	2	2	2	2	2	2	2	2
		Z-40°C/Z+20°C	4	3	3	3	3	3	3	3	3
		(120Hz)									
Endurance (125°C)	Test time	2000 hours ( $\phi 4$ to $\phi 8 \times 6.5L$ : 1000 hours, $\phi 12.5 \times 13.5L$ : 5000 hours)									
	Leakage current	The initial specified value or less									
	Capacitance change	Within ±30% of initial value									
	Tangent of loss angle	300% or less of the initial specified value									
Shelf life (125°C)	Test time : 1000hours ; other items are same as the endurance. Voltage application treatment : According to JIS C5101-4										
Applicable standards	JIS C5101-1 1998, -18 1999 (IEC 60384-1 1992, -18 1993)										

### Outline Drawing

Unit : mm



- Soldering conditions are described on page 15.
- Land pattern size are described on page 13.
- The taping specifications are described on page 16.

### Coefficient of Frequency for Rated Ripple Current

Frequency (Hz)	120	1k	10k	100k
Rated voltage(V)				
10 to 100	0.77	0.88	0.96	1.00

### Part numbering system

$\phi 10 \times 10L$  or less (example : 16V100µF)

RVT	—	35	V	221	M	H10	U	—	□
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol			Taping symbol

In the case of "for High Temperature Reflow" type, a series name is "RZC".

$\phi 12.5 \times 13.5$  (example : 35V330µF)

RVT	—	35	V	331	M	IE	T	—	R5
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol			Taping symbol

If "For Vibration Resistance" type is required, please see the series RTT of page 90.

Standard Ratings

Rated voltage(V) Rated capacitance(μF)	Item	10				16				25			
		Case φD×L (mm)	ESR(Ω max.)		Rated ripple current (mArms)	Case φD×L (mm)	ESR(Ω max.)		Rated ripple current (mArms)	Case φD×L (mm)	ESR(Ω max.)		Rated ripple current (mArms)
			20°C	-40°C			20°C	-40°C			20°C	-40°C	
10	—	—	—	—	4×5.8	3.0	45	50	5×5.8	1.5	23	81	
22	4×5.8	3.0	45	50	5×5.8	1.5	23	81	6.3×5.8	1.0	15	114	
33	5×5.8	1.5	23	81	6.3×5.8	1.0	15	114	6.3×5.8	1.0	15	114	
47	—	—	—	—	6.3×5.8	1.0	15	114	6.3×7.7	0.60	9.0	165	
	—	—	—	—					8×6.5	0.60	9.0	180	
100	—	—	—	—	—	—	—	—	6.3×7.7	0.60	9.0	165	
	—	—	—	—					8×6.5	0.60	9.0	180	
	—	—	—	—					8×10	0.20	2.0	340	
220	6.3×7.7	0.60	9.0	165	8×10	0.20	2.0	340	8×10	0.20	2.0	340	
	8×6.5	0.60	9.0	180	10×10	0.15	1.5	500	10×10	0.15	1.5	500	
330	8×10	0.20	2.0	340	10×10	0.15	1.5	500	10×10	0.15	1.5	500	
	10×10	0.15	1.5	500					12.5×13.5	0.086	1.29	750	
470	10×10	0.15	1.5	500	12.5×13.5	0.086	1.29	750	12.5×13.5	0.086	1.29	750	
680	12.5×13.5	0.086	1.29	750	12.5×13.5	0.086	1.29	750	—	—	—	—	
1000	12.5×13.5	0.086	1.29	750	—	—	—	—	—	—	—	—	

Rated voltage(V) Rated capacitance(μF)	Item	35				50				63			
		Case φD×L (mm)	ESR(Ω max.)		Rated ripple current (mArms)	Case φD×L (mm)	ESR(Ω max.)		Rated ripple current (mArms)	Case φD×L (mm)	ESR(Ω max.)		Rated ripple current (mArms)
			20°C	-40°C			20°C	-40°C			20°C	-40°C	
4.7	4×5.8	3.0	45	50	—	—	—	—	—	—	—	—	
10	5×5.8	1.5	23	81	6.3×5.8	3.2	48	58	6.3×7.7	1.8	36	95	
	6.3×5.8	1.0	15	114									
22	6.3×5.8	1.0	15	114	6.3×7.7	1.2	18	95	8×10	0.70	14	140	
33	6.3×7.7	0.60	9.0	165	6.3×7.7	1.2	18	95	8×10	0.70	14	140	
	8×6.5	0.60	9.0	180	8×10	0.50	7.5	180	10×10	0.50	10	200	
47	6.3×7.7	0.60	9.0	165	8×10	0.50	7.5	180	8×10	0.70	14	140	
	8×6.5	0.60	9.0	180									
	8×10	0.20	2.0	340									
100	8×10	0.20	2.0	340	10×10	0.30	4.5	280	12.5×13.5	0.25	3.75	400	
	10×10	0.15	1.5	500	12.5×13.5	0.18	2.7	550					
220	10×10	0.15	1.5	500	12.5×13.5	0.18	2.7	550	—	—	—	—	
330	12.5×13.5	0.086	1.29	750	—	—	—	—	—	—	—	—	

Rated voltage(V) Rated capacitance(μF)	Item	80				100			
		Case φD×L (mm)	ESR(Ω max.)		Rated ripple current (mArms)	Case φD×L (mm)	ESR(Ω max.)		Rated ripple current (mArms)
			20°C	-40°C			20°C	-40°C	
10	8×10	0.75	15	110	8×10	0.75	15	110	
22	8×10	0.75	15	110	8×10	0.75	15	110	
	10×10	0.55	11	150	10×10	0.55	11	150	
33	8×10	0.75	15	110	10×10	0.55	11	150	
	10×10	0.55	11	150					
47	—	—	—	—	12.5×13.5	0.32	4.8	300	

(Note) Rated ripple current : 125°C, 100kHz  
ESR : 100kHz