

Code in front of series have been extracted from product code, which describes the segment of products, such as type and features.

- Guaranteed 3000 hours at 135°C. (63V to 80V : 2000 hours)
- High temperature guaranteed for automotive.
- High CV, low ESR, high ripple current capacitors.
- For ECU of Direct injection engine, ESP etc.
- Environmental : GREEN CAP™, RoHS compliance.



High CV
High ripple



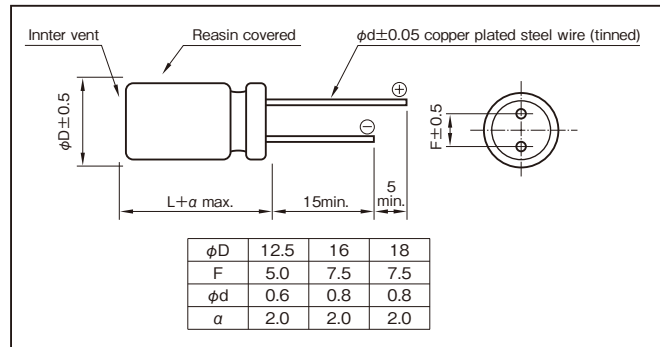
Marking color : Black print

Specifications

Item	Performance					
Category temperature range (°C)	-40 to +135					
Tolerance at rated capacitance (%)	±20 (20°C,120Hz)					
Leakage current (μA) (max.)	0.01CV or 3 whichever is larger (after 2 minutes) C : Rated capacitance (μF), V : Rated voltage (V) (20°C)					
Tangent of loss angle (tanδ)	Rated voltage (V)	25	35	50	63	80
	tanδ (max.)	0.14	0.12	0.10	0.10	0.08
0.02 is added to every 1000μF increase over 1000μF. (20°C,120Hz)						
Characteristics at high and low temperature	Rated voltage (V)	25	35	50	63	80
	Impedance ratio (max.)	Z-40°C/Z+20°C	3	3	3	3
(120Hz)						
Endurance 1 (135°C) (Applied ripple current)	Test time	3000 hours (63V to 80V : 2000 hours)				
	Leakage current	The initial specified value or less				
	Percentage of capacitance change	Within ±30% of initial value				
	Tangent of the loss angle	300% or less of the initial specified value				
Endurance 2 (125°C) (Applied ripple current)	Test time	3000 hours (63V to 80V : 2000 hours)				
	Leakage current	The initial specified value or less				
	Percentage of capacitance change	Within ±30% of initial value				
	Tangent of the loss angle	300% or less of the initial specified value				
Shelf life (135°C)	Test time : 1000hours ; other items are same as the endurance. Voltage application treatment : According to JIS C5101-4 4.1					
Applicable standards	JIS C5101 - 1, - 4 (IEC 60384 - 1, - 4)					

Outline Drawing

Unit : mm



Coefficient of Frequency for Rated Ripple Current

Rated capacitance (μF) \ Frequency (Hz)	50 · 60	120	1k	10k · 100k
270	0.55	0.65	0.85	1
390 to 1000	0.70	0.75	0.90	1
1100 to 12000	0.80	0.85	0.95	1

Product code system : 25V2000μF
(*For automotive: powertrain, safety)

RA*	RKC	202	M	1T	G20	300	T
Category code	Series code	capacitance code	Cap tol. code	Voltage code	Size code	Lead-forming and packing code	Additional code

- For details, refer to the various "Product Code System" pages.
 - Lead-forming and packing code on this page are for lead long and standard packing products.
- For standard packing, please refer to the "PACKING" page.

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Standard Ratings

Rated voltage (V)	Item	25 (1T)						35 (1G)						50 (1U)					
		Case $\phi D \times L$ (mm)	Size code	ESR (Ω max. / 100kHz)		Rated ripple current (mA rms / 100kHz)		Case $\phi D \times L$ (mm)	Size code	ESR (Ω max. / 100kHz)		Rated ripple current (mA rms / 100kHz)		Case $\phi D \times L$ (mm)	Size code	ESR (Ω max. / 100kHz)		Rated ripple current (mA rms / 100kHz)	
				20°C	-40°C	135°C	125°C			20°C	-40°C	135°C	125°C			20°C	-40°C	135°C	125°C
620	—	—	—	—	—	—	—	—	—	—	—	—	—	12.5 × 20	G20	0.073	0.88	1470	2400
820	—	—	—	—	—	—	—	—	—	—	—	—	—	12.5 × 25	G25	0.058	0.67	2260	3350
1000	—	—	—	—	—	—	—	—	—	—	—	—	—	16 × 20	J20	0.050	0.55	1870	2960
1100	—	—	—	—	—	—	—	—	—	—	—	—	—	12.5 × 30	G30	0.048	0.52	2520	4220
1300	—	—	—	—	—	—	—	12.5 × 20	G20	0.042	0.48	1690	2760	12.5 × 35	G35	0.042	0.44	2780	4810
														16 × 25	J25	0.042	0.44	2500	4040
														18 × 20	K20	0.042	0.44	2110	3130
1600	—	—	—	—	—	—	—	—	—	—	—	—	—	12.5 × 40	G40	0.037	0.36	3020	5240
														16 × 31.5	J31	0.035	0.36	2960	5130
1800	—	—	—	—	—	—	—	12.5 × 25	G25	0.033	0.30	2010	3480	18 × 25	K25	0.033	0.32	2530	4230
2000	12.5 × 20	G20	—	0.042	0.48	1690	2760	16 × 20	J20	0.035	0.27	2160	3040	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	12.5 × 30	G30	0.028	0.24	2900	4490	16 × 35.5	J35	0.029	0.27	3160	5480
2400	—	—	—	—	—	—	—	18 × 20	K20	0.034	0.22	2320	3250	18 × 31.5	K31	0.028	0.25	3020	5240
2700	—	—	—	—	—	—	—	12.5 × 35	G35	0.025	0.21	3190	5140	16 × 40	J40	0.025	0.22	3420	5930
3000	12.5 × 25	G25	—	0.033	0.30	2010	3480	16 × 25	J25	0.028	0.22	2870	4260	18 × 35.5	K35	0.024	0.20	3390	5870
3300	16 × 20	J20	—	0.035	0.27	2160	3040	12.5 × 40	G40	0.024	0.19	3470	5810	—	—	—	—	—	—
3600	12.5 × 30	G30	—	0.028	0.24	2900	4490	16 × 31.5	J31	0.023	0.18	3400	5480	18 × 40	K40	0.023	0.16	3700	6420
3900	—	—	—	—	—	—	—	18 × 25	K25	0.027	0.19	2900	4500	—	—	—	—	—	—
4300	18 × 20	K20	—	0.034	0.22	2320	3250	16 × 35.5	J35	0.020	0.14	3630	6070	—	—	—	—	—	—
4700	12.5 × 35	G35	—	0.025	0.21	3190	5140	18 × 31.5	K31	0.022	0.16	3470	5600	—	—	—	—	—	—
	16 × 25	J25	—	0.028	0.22	2870	4260												
5100	12.5 × 40	G40	—	0.024	0.19	3470	5810	—	—	—	—	—	—	—	—	—	—	—	—
5600	16 × 31.5	J31	—	0.023	0.18	3400	5480	16 × 40	J40	0.019	0.12	3930	6810	—	—	—	—	—	—
6200	—	—	—	—	—	—	—	18 × 35.5	K35	0.019	0.12	3750	6280	—	—	—	—	—	—
7500	16 × 35.5	J35	—	0.020	0.14	3630	6070	18 × 40	K40	0.018	0.10	4080	7070	—	—	—	—	—	—
	18 × 31.5	K31	—	0.022	0.16	3470	5600												
9100	16 × 40	J40	—	0.019	0.12	3930	6810	—	—	—	—	—	—	—	—	—	—	—	—
10000	18 × 35.5	K35	—	0.019	0.12	3750	6280	—	—	—	—	—	—	—	—	—	—	—	—
12000	18 × 40	K40	—	0.018	0.10	4080	7070	—	—	—	—	—	—	—	—	—	—	—	—

Rated voltage (V)	Item	63 (4E)						80 (1R)					
		Case $\phi D \times L$ (mm)	Size code	ESR (Ω max. / 100kHz)		Rated ripple current (mA rms / 100kHz)		Case $\phi D \times L$ (mm)	Size code	ESR (Ω max. / 100kHz)		Rated ripple current (mA rms / 100kHz)	
				20°C	-40°C	135°C	125°C			20°C	-40°C	135°C	125°C
270	—	—	—	—	—	—	—	12.5 × 20	G20	0.072	0.56	1420	1640
390	12.5 × 20	G20	—	0.072	0.56	1420	1640	12.5 × 25	G25	0.052	0.39	2050	2520
470	—	—	—	—	—	—	—	16 × 20	J20	0.053	0.34	1910	2140
510	—	—	—	—	—	—	—	12.5 × 30	G30	0.042	0.30	2630	3110
560	12.5 × 25	G25	—	0.052	0.39	2050	2520	—	—	—	—	—	—
620	—	—	—	—	—	—	—	12.5 × 35	G35	0.035	0.25	2970	3760
								18 × 20	K20	0.044	0.26	2100	2350
680	16 × 20	J20	—	0.053	0.34	1910	2140	16 × 25	J25	0.038	0.23	2680	2940
750	12.5 × 30	G30	—	0.042	0.30	2630	3110	12.5 × 40	G40	0.031	0.22	3260	4610
								16 × 31.5	J31	0.034	0.20	3050	3860
820	—	—	—	—	—	—	—	18 × 25	K25	0.033	0.19	2810	3080
910	12.5 × 35	G35	—	0.035	0.25	2970	3760	—	—	—	—	—	—
	18 × 20	K20	—	0.044	0.26	2100	2350						
1000	16 × 25	J25	—	0.038	0.23	2680	2940	16 × 35.5	J35	0.027	0.15	3420	4590
1100	12.5 × 40	G40	—	0.031	0.22	3260	4610	18 × 31.5	K31	0.028	0.15	3220	4080
1200	16 × 31.5	J31	—	0.034	0.20	3050	3860	—	—	—	—	—	—
1300	18 × 25	K25	—	0.033	0.19	2810	3080	16 × 40	J40	0.025	0.14	3670	5190
								18 × 35.5	K35	0.022	0.12	3690	5220
1600	16 × 35.5	J35	—	0.027	0.15	3420	4590	18 × 40	K40	0.021	0.11	3820	5660
	18 × 31.5	K31	—	0.028	0.15	3220	4080						
1800	16 × 40	J40	—	0.025	0.14	3670	5190	—	—	—	—	—	—
2200	18 × 35.5	K35	—	0.022	0.12	3690	5220	—	—	—	—	—	—
2400	18 × 40	K40	—	0.021	0.11	3820	5660	—	—	—	—	—	—

NOTE : Design, Specifications are subject to change without notice.
It is recommended that you shall obtain technical specifications from ELNA to ensure that the component is suitable for your use.