

# Miniature Aluminum Electrolytic Capacitors RKE series

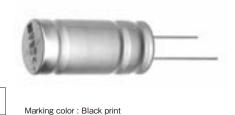
Code in front of series have been extracted from product code, which describes the segment of products, such as type and features.

RKD

High vibration resistance

RKE

- Vibration resistance (40G,10 to 2000Hz, X,Y,Z = per 2hours).
- For Automotive application (ABS and electric power steering etc.)
- Guaranteed 5000 hours at 125°C.
- Environmental : GREEN CAP™ , RoHS compliance.

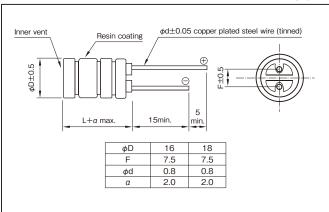


#### Specifications

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Item	Performance 40 to 1405												
Category temperature range (°C)		-40 to +125 ±20 (20°C,120Hz)											
Tolerance at rated capacitance (%)	±20 (20°C,120H												
Leakage current (μA) (max.)	0.01CV or 3 whichever is larger (after 2 minutes) C : Rated capacitance (μF), V : Rated voltage (V)												
Tangent of loss angle	Rated vol	tage (V)	25	35	50								
(tanδ)	tanδ (i	max.)	0.14	0.12	0.10								
	0.02 is added to every 10	00μF increase over 1000	)μF.		(20°C	,120Hz)							
Characteristics at high	Rated vol	tage (V)	25	35	50								
and low temperature	Impedance ratio (max.)	Z-40°C/Z+20°C	3	3	3								
						(120Hz)							
	Test	time	5000 hours										
Endurance (125°C)	Leakage	current	The initial specified value or less										
(Applied ripple current)	Percentage of cap	acitance change	Within ±30% of initial value										
	Tangent of th	e loss angle	300% or less of the initial specified value										
Shelf life (125°C)	Test time: 100	Test time: 1000hours; other items are same as the endurance. Voltage application treatment: According to JIS C5101-4 4.1											
	Vibration test condition												
	Frequenc	y range	10 to 2000Hz										
	Amplitude or	Acceleration	1.5 mm peak to peak or 40G (392m/s²), whichever is the less severe										
Vibration	Sweep	rate	0.5 octave/min.										
	Vibration axis	and duration	X, Y, Z per 2 hours, total 6 hours										
	Fixa	ion	Capacitor mounted by its body which is rigidly clamped to the work surface.										
	Specification after test												
	Leakage	current	The initial specified value or less										
	Percentage of cap	acitance change	Within ±30% of initial value										
	Tangent of the loss angle 300% or less of the initial specified value												
Applicable standards	JIS C5101 - 1, - 4 (IEC 60384 - 1, - 4)												

#### **Outline Drawing**





### Coefficient of Frequency for Rated Ripple Current

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Rated Frequency (Hz) capacitance (µF)	120	1k	10k	100k
1200 to 6800	0.85	0.95	1.00	1

Product code system : 35V2700µF (*For automotive: powertrain, safety)											
RA*	RKE	272	М	1 G	K31	300	Т				
Category code	Series code	capacitance code	Cap tol.	Voltage code	Size code	Lead-forming and packing code	Additional code				

- $\boldsymbol{\cdot}$  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)	25 (1T)					35 (1G)					50 (1U)				
Rated capacitance (µF)	Case	Size code	ESR (Ω max.)		Rated ripple current	Case	Size code	ESR (Ω max.)		Rated ripple current	Case Size code	ESR (Ω max.)		Rated ripple current	
	$\phi D \times L (mm)$		20℃	-40°C	(mArms)	$\phi D \times L (mm)$		20℃	-40°C	(mArms)	$\phi D \times L (mm)$	Size code	20℃	-40℃	(mArms)
1200	-	_	_	_	-	-	_	_	_	-	16×31.5	J31	0.048	0.20	2940
1500	_	_	_	_	-	16×31.5	J31	0.024	0.14	3160	16×35.5	J35	0.039	0.16	3300
2200	-	_	_	_	_	16×35.5	J35	0.023	0.13	3590	18×35.5	K35	0.033	0.15	3520
2700	16×31.5	J31	0.024	0.14	3160	18×31.5	K31	0.020	0.11	3410	-	_	_	_	_
3300	16×35.5	J35	0.023	0.13	3590	18×35.5	K35	0.019	0.10	3840	-	_	_	_	_
4700	18×31.5	K31	0.020	0.11	3410	18×40	K40	0.017	0.094	4250	_	_	_	_	_
5600	18×35.5	K35	0.019	0.10	3840	-	_	_	_	_	-	_	_	_	_
6800	18×40	K40	0.017	0.094	4250	-	_	_	_	_	=	_	_	_	_

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