

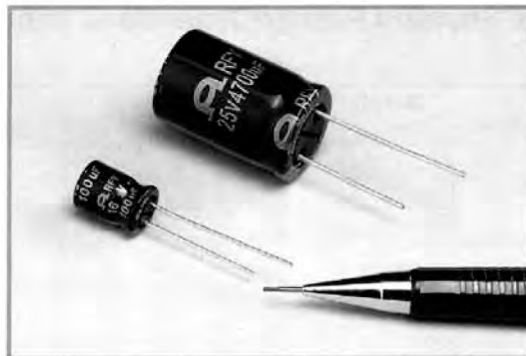


RFY SERIES

Extremely Low Z, High Ripple Current, Radial Leads

Features

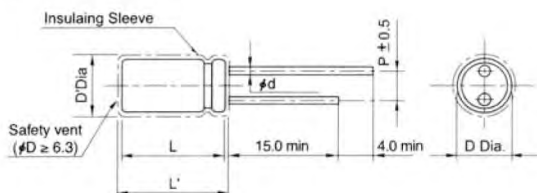
- Extremely low ESR at high frequency(Lower than RFX)
- For switching mode power supply
- Load life of 2000 hours at 105°C



Specifications

Item	Performance Characteristics			
Operating temperature range	-40°C ~ +105°C			
Rated working voltage range	6.3V ~ 16V			
Nominal capacitance range	470 μ F ~ 3300 μ F, \pm 20% (at 20°C, 120Hz)			
D.C Leakage current(at 20°C)	The following specifications shall be satisfied when the rated voltage is applied for the required time. $I \leq 0.03CV(2 \text{ min})$ Where I =Leakage current(μ A) C=Nominal capacitance(μ F) V=Rated voltage(V)			
Tan δ (max., at 20°C, 120Hz)	W.V(V)	6.3	10	16
	Tan δ	0.22	0.19	0.16
When capacitance is over 1000 μ F, Tan δ shall be added 0.02 to the listed value with increase of every each 1000 μ F.				
Characteristics at low temperature (max.) (impedance ratio at 120Hz)	W.V(V)	6.3	10	16
	Z-40°C/Z+20°C	3	3	3
Load life	After applying rated working voltage for 2000 hours at +105°C and then being stabilized at +20°C, capacitors shall meet following limits.			
	Capacitance change	Within \pm 25% of the initial measured value		
	Tan δ	\leq 200% of the initial specified value		
	Leakage current	\leq The initial specified value		
Shelf life	After storage for 1000 hours at +105°C with no voltage applied and then being stabilized at +20°C, capacitors shall meet following limits.			
	Capacitance change	Within \pm 25% of the initial measured value		
	Tan δ	\leq 200% of the initial specified value		
	Leakage current	\leq 200% of the initial specified value		

Dimensions



Standard lead style

ϕ D	8.0	10
P	3.5	5.0
ϕ d	0.6	

D'=[D +0.5] Max.

L'=[L+1.0] Max. at D \leq 8.0

L'=[L+1.5]Max. at D \geq 10.0

Ripple current coefficient

Frequency

Freq(Hz)	120	1K	10K	100K
Factor	0.5	0.8	0.9	1.0

Temperature

Temperature	\leq 70°C	85°C	105°C
Factor	2.1	1.7	1.0



RFY SERIES

Standard Ratings [Dimensions, ESR, Ripple Current]

 ϕ D x L(mm)

Cap(μ F)	W.V(V)	6.3(0J)			10(1A)			16(1C)		
		SIZE	ESR	I _r	SIZE	ESR	I _r	SIZE	ESR	I _r
470								8 x 11.5	0.036	1140
680		8 x 11.5	0.036	1140	8 x 11.5	0.036	1140	10 x 12.5	0.026	1490
820		8 x 11.5	0.036	1140						
1000		10 x 12.5	0.026	1540	10 x 12.5	0.026	1540	10 x 16	0.019	2000
1200		10 x 12.5	0.026	1540				8 x 20	0.016	2350
1500		8 x 20	0.019	1540	10 x 16	0.019	2000	10 x 20	0.013	2550
		10 x 12.5	0.026	1540	8 x 20	0.019	1870			
1800		10 x 16	0.019	2000	10 x 25	0.013	2550	10 x 25	0.012	2800
		8 x 20	0.019	1870						
2200		10 x 20	0.013	2550	10 x 25	0.012	2550			
3300		10 x 25	0.012	2800						

 I_r: Maximum permissible ripple current[mA(rms) at 105°C, 100KHz]

 ESR : Max. ESR [Ω at 20°C, 100KHz]

ORDERING INFORMATION for Leaded Type



Daewoo Components Corp.

Through-Hole Part Numbering System Example:

RM = Leaded Radial 85°C Miniature Series, **102** = 1000µF, **M** =20% Tolerance, **1E** 25 Volts, **B** = Bulk,
1020 = Case size (Dia x H) = 10.0 x 20.0mm, **E** = 5.0mm



(1) Series

See Quick Guide on page 2
Example: RSS, RM, RMU,...

(2) Capacitance Value Code

Capacitance expressed in micro Farads (µF)
First two digits are significant figures
Third digit denotes the number of zeros
Use R for decimal point for values less than 10µF

Examples:

CODE	Capacitance
R10	0.1 µF
R68	0.68 µF
1R0	1.0 µF
100	10 µF
680	68 µF
471	470 µF
102	1000 µF
103	10000 µF

(3) Capacitance Tolerance Code

CODE	Cap. Tol.	CODE	Cap. Tol.
J	±5%	V	-10% ~ +20%
K	±10%	Q	-10% ~ +30%
M	±20%	T	-10% ~ +50%
R	+20%, -0%		

(4) Rated Voltage Code

CODE	Voltage	CODE	Voltage
0G	4.0V	2C	160V
0J	6.3V	2S	180V
1A	10V	2D	200V
1C	16V	2E	250V
1E	25V	2F	315V
1V	35V	2V	350V
1H	50V	2G	400V
1J	63V	2W	450V
1K	80V	3Z	1000V
2A	100V		

(5) Packaging Form & Lead Style Code (see page 7, 8, 9 for details)

	Code	Packaging Form & Lead Style
Bulk	B	Bulk: Standard Package
	L	Bulk: 4 -8ø Long Leads Formed to 5 mm Pitch
Snap-In	1	10-13ø Snap-in Cut 5.0mm
	2	16-13ø Snap-in Cut 5.0mm
	3	10-13ø Snap-in Cut 4.5mm
	4	16-18ø Snap-in Cut 4.5mm
	5	4-8ø Snap-in Cut 7.5mm
Form	F	4-8ø Forming Cut 6.5mm
	G	4-8ø Forming Cut 10.0mm
Straight Cut	C	4-18ø Straight Cut 4.0mm
	6	4-18ø Straight Cut 3.1mm
	7	4-18ø Straight Cut 5.0mm
	8	4-18ø Straight Cut 6.35mm
Ammo Tape (+) Leading	A	4-8ø Straight Ammo
		Detail Ranges: 4-6.3ø; F=2.5mm 8ø; F=3.5mm
		4-8ø Form Tape & Ammo 5mm Pitch
		10ø Straight Ammo Tape 5mm Pitch
		13ø Straight Ammo Tape 5mm Pitch
16-18ø Straight Ammo Tape 5mm Pitch		
Tape & Reel (+) Leading	T	4-8ø Straight Ammo
		Detail Ranges: 4-6.3ø; F=2.5mm 8ø; F=3.5mm
		4-13ø Form Tape & Reel 5mm Pitch
		10-13ø Straight Reel Tape 5mm Pitch

NOTE: Standard Pack Anode(+) Lead Leading FEEDS OFF FIRST
Special Option Cathode(-) Lead Leading available upon request
Standard Packages: B = Bulk, A = Ammo, T = Tape & Reel

(6) Example Dimension Code (Diameter x Height in mm)

Size Code	Diameter	Height	Size Code	Diameter	Height
0405	4	5	1320	13	20
0407	4	7	1631	16	31.5
0505	5	5	1835	18	35.5
0507	5	7	2240	22	40
0607	6.3	7	2545	25	45
0511	5	11	3035	30	35
0605	6	5	3500	35	100
0611	6.3	11	3501	35	110
0805	8	5	5102	51	120
0811	8	11	6303	63.5	130
1012	10	12.5	7604	76	140
1220	12.5	20	8904	89	140

(7) Lead Spacing Code (LS)

Code	X	A	B	C	D	E	J	F
LS	1.0	1.5	2.0	2.5	3.5	5.0	7.0	7.5
Code	K	M	G	P	H	Q	R	S
LS	8.0	10.0	10.5	12.0	12.5	12.8	15.0	16.0
Code	T	U	V	W	Y	Z		
LS	20.0	21.7	28.3	30.0	31.6	32		