

RSA SERIES

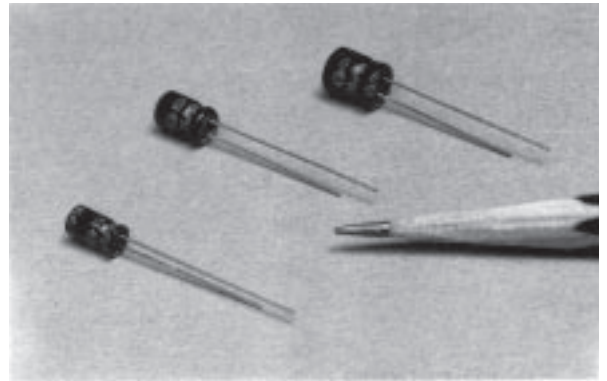


ALUMINUM ELECTROLYTIC CAPACITORS

Miniature, 7mm Height, High CV, Radial Leads

Features

- Miniature, High CV, Radial
- Lengths are all 7mm (Smaller than RSM)
- VTR, video camera, car radio, micro cassette tape recorder etc.
- Low cost alternative to tantalum beads
- Load life of 1000 hours at 85°C

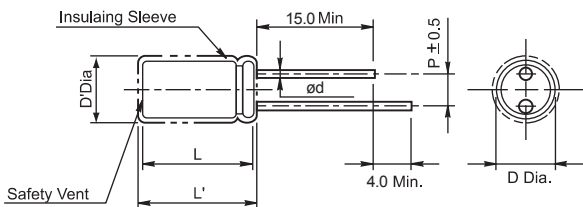


Specifications

Item	Performance Characteristics						
Operating temperature range	-40°C ~ +85°C						
Rated working voltage range	6.3V ~ 50V						
Nominal capacitance range	0.1 μF ~ 220 μF, ±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. $I \leq 0.01CV$ or $3 \mu A$ (2 min), whichever is greater Where I = Leakage current (μA) C = Nominal capacitance (μF) V = Rated voltage (V)						
Tan δ (max., at 20°C, 120Hz)	W.V(V)	6.3	10	16	25	35	50
	Tan δ	0.26	0.22	0.19	0.16	0.12	0.10
Characteristics at low temperature (max.) (impedance ratio at 120Hz)	W.V(V)	6.3	10	16	25	35	50
	Z-25°C/Z20°C	4	3	2	2	2	2
	Z-40°C/Z20°C	8	6	4	4	4	4
Load life	After applying rated working voltage for 1000 hours at +85°C and then being stabilized at +20°C, capacitors shall meet following limits.						
	Capacitance change	Within ± 25% of initial measured value					
	Tan δ	≤ ± 200% of initial specified value					
Shelf life	After storage for 1000 hours at + 85°C with no voltage applied and then being stabilized at +20°C, capacitors shall meet following limits.						
	Capacitance change	Within ± 20% of initial measured value					
	Tan δ	≤ 200% of initial specified value					
	Leakage current	≤ Initial specified value					
	Leakage current	≤ 200% of initial specified value					

Case sizes and Dimensions

Dimensions & Maximum permissible ripple current [mA(ms) at 85°C, 120Hz]



- Standard lead style

øD	4.0	5.0	6.3
P	1.5	2.0	2.5
ød	0.45		

$D' = [D + 0.5] \text{Max.}$

$L' = [L + 1.0] \text{Max.}$

W.V	øD x L (mm)											
	6.3		10		16		25		35		50	
Cap (μF)	SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r
0.1											4x7	1
0.22											4x7	2
0.33											4x7	3
0.47											4x7	5
1.0											4x7	10
2.2											4x7	16
3.3											4x7	18
4.7									4x7	21	4x7	25
6.8									4x7	25	5x7	28
10							4x7	28	4x7	31	5x7	35
22			4x7	35	4x7	40	5x7	50	5x7	55	6.3x7	58
33	4x7	40	4x7	44	5x7	55	5x7	63	6.3x7	66		
47	4x7	48	5x7	60	5x7	65	6.3x7	78				
100	5x7	78	6.3x7	87	6.3x7	98						
220	6.3x7	110										

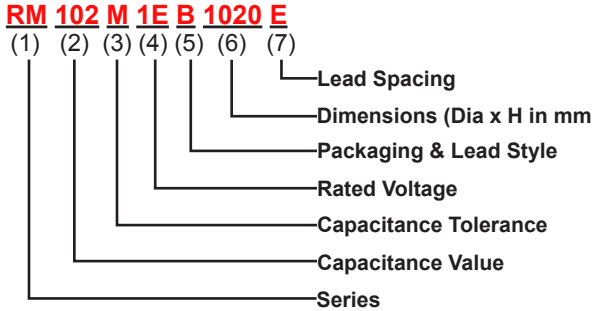
ORDERING INFORMATION for Leaded Type



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		