

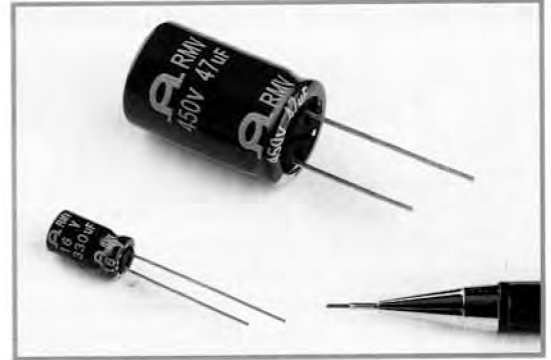


RMV SERIES

105°C, Sub-miniature, Radial Leads

Features

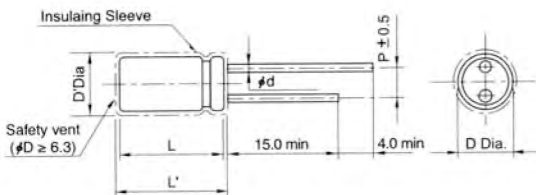
- 105°C, Sub-miniature, Radial
- Wide Operating Temperature Range
- High CV (Smaller than RMU)
- Load Life of 1000 hours at 105°C



Specifications

Item	Performance Characteristics										
Operating temperature range	-40°C ~ +105°C			-40°C ~ +105°C				-25°C ~ +105°C			
Rated working voltage range	6.3V ~ 100V			160V ~ 250V				350V ~ 450V			
Nominal capacitance range	0.47 μF ~ 22,000 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 ≤ 0.01CV or 3 μA (2min)			I ≤ 0.01CV + 10 μA (3min)				I ≤ 0.02CV + 30 μA (5min)			
	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	63	100	160~250	350~450
	Tan δ	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.08	0.15	0.20
	When capacitance is over 1000 μF, Tan δ shall be added 0.02 to the listed value with increase of every each 1000 μF.										
Characteristics at low temperature (max.) (impedance ratio at 120Hz)	W.V(V)	6.3	10	16	25	35	50~100	160~250	350~450		
	Z -25°C/±20°C	5	4	3	2	2	2	3	6		
	Z -40°C/±20°C	10	8	6	4	3	3	6	-		
Load life	After applying rated working voltage for 1000hrs at +105°C and then being stabilized at +20°C, capacitors shall meet following limits.										
	Capacitance change	Within ± 20% of the initial measured value									
	Tan δ	≤ 200% of the initial specified value									
	Leakage current	≤ The initial specified value									
Shelf life	After storage for 1000hrs at +105°C with no voltage applied and then being stabilized at +20°C, capacitors shall meet following limits.										
	Capacitance change	Within ± 20% of the initial measured value									
	Tan δ	≤ 150% of the initial specified value									
	Leakage current	≤ The initial specified value									

Dimensions



Standard lead style

φD	5.0	6.3	8.0	10.0	12.5	16.0	18.0
P	2.0	2.5	3.5	5.0	7.5		
φd	0.5		0.6			0.8	

D' = [D + 0.5] Max.

L' = [L + 1.0] Max. at D ≤ 8.0

L' = [L + 1.5] Max. at D ≥ 10.0

Ripple current coefficient

Frequency

Cap(μF)	Freq(Hz)	50	120	400	1K	10K	50~100K
Cap ≤ 10		0.8	1.0	1.30	1.45	1.65	1.70
10 < Cap ≤ 100		0.8	1.0	1.23	1.36	1.48	1.53
100 < Cap ≤ 1000		0.8	1.0	1.16	1.25	1.35	1.38
1000 < Cap		0.8	1.0	1.11	1.17	1.25	1.28

Temperature

Temperature	≤ 70°C	85°C	105°C
Factor	1.95	1.65	1.0



RMV SERIES

■ Dimensions & Maximum Permissible Ripple Current[mA(rms) at 105°C, 120Hz]

φ D x L(mm)

W.V(V) Cap(μf)	6.3(0J)		10(1A)		16(1C)		25(1E)		35(1V)		50(1H)		63(1J)	
	SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r
0.47											5x11	6		
1.0											5x11	12		
2.2											5x11	20		
3.3											5x11	25		
4.7											5x11	29		
10											5x11	43		
22											5x11	68	5x11	75
33											5x11	92	6.3x11	100
47									5x11	99	6.3x11	111	6.3x11	125
100							5x11	129	6.3x11	150	8x11.5	186	8x11.5	207
220			5x11	164	6.3x11	209	6.3x11	207	8x11.5	250	10x12.5	307	10x16	357
330			6.3x11	232	6.3x11	239	8x11.5	295	10x12.5	350	10x16	429	10x20	500
470			6.3x11	275	8x11.5	321	10x12.5	411	10x16	507	10x20	564	12.5x20	643
1000	8x11.5	441	10x12.5	471	10x12.5	514	10x16	625	12.5x20	821	12.5x25	964	16x25	1064
2200	10x16	686	10x16	786	10x20	750	12.5x25	1143	16x25	1321	16x31.5	1429	18x35.5	1679
3300	10x20	964	12.5x20	1079	12.5x25	1264	16x25	1464	16x31.5	1550	18x35.5	1786		
4700	12.5x20	1150	12.5x25	1357	16x25	1543	16x25	1607	16x35.5	1786				
6800	12.5x25	1407	16x25	1643	16x25	1707	16x35.5	1936	18x40	2000				
10000	16x25	1643	16x31.5	1900	16x35.5	1964	18x40	2079						
15000	16x31.5	2050	16x35.5	2150	18x40	2300								
22000	18x35.5	2593	18x40	2679										

W.V(V) Cap(μf)	100(2A)		160(2C)		200(2D)		250(2E)		350(2V)		400(2G)		450(2W)	
	SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r	SIZE	I _r
0.47	5x11	8			6.3x11	11					6.3x11	9		
1.0	5x11	15			6.3x11	16					6.3x11	14		
2.2	5x11	21			6.3x11	24					8x11.5	26	8x11.5	20
3.3	5x11	29			6.3x11	30	6.3x11	29	6.3x11	21	8x11.5	34	10x12.5	29
4.7	5x11	32			6.3x11	37	6.3x11	36	8x11.5	31	10x12.5	43	10x12.5	34
10	5x11	54	8x11.5	61	8x11.5	61	10x12.5	71	10x12.5	39	10x16	68	10x20	64
22	6.3x11	94	10x12.5	96	10x16	107	10x20	114	12.5x20	64	12.5x25	143	12.5x25	107
33	8x11.5	132	10x16	132	10x20	143	10x20	143	12.5x25	114	16x25	171	16x25	143
47	8x11.5	150	10x20	157	12.5x20	193	12.5x20	193	16x25	157	16x25	221	16x31.5	186
68	8x11.5	196	12.5x20	257	12.5x25	264	16x25	286	16x31.5	221	16x31.5	286	18x35.5	214
100	10x16	243	12.5x25	329	16x25	336	16x25	336	16x35.5	300	18x35.5	343	18x40	221
220	12.5x20	407	16x31.5	425	16x35.5	507	18x35.5	514						
330	12.5x25	571	18x35.5	621	18x40	700								
470	16x25	750	18x40	857										
1000	18x31.5	1071												

I_r : Maximum permissible ripple current [mA(rms) at 105°C, 120Hz]

General

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		