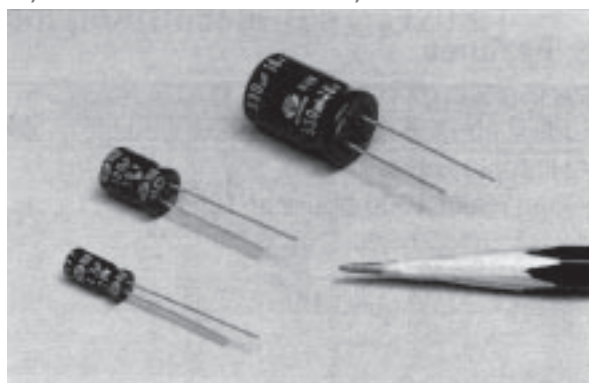


### Features

- Bi-polar, Radial
- Ideal for inconsistent polarity circuits
- High performance
- load life of 1000 hours at 105°C

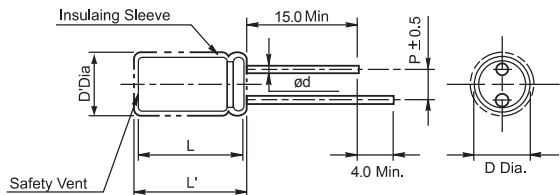


### Specifications

Item	Performance Characteristics				
Operating temperature range	-40°C ~ +105°C				
Rated working voltage range	10V ~ 50V				
Nominal capacitance range	0.47 μF ~ 1000 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. $I \leq 0.03CV$ or $3 \mu A(5 \text{ min})$ , 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)	10	16	25	50
	Tan δ	0.20	0.17	0.16	0.12
Characteristics at low temperature(max.) (impedance ratio at 120Hz)	W.V(V)	10	16	25	50
	Z-25°C/Z20°C	3	2	2	2
	Z-40°C/Z20°C	6	4	3	3
Load life	After applying rated working voltage for 1000 hours at +105°C with the polarity inverted every 250 hours 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			
Shelf life	After storage for 500 hours at +105°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	≤ 150% of initial specified value			
	Leakage current	≤ 200% of initial specified value			

### Case sizes and Dimensions

### Dimensions & Maximum permissible ripple current [mA(rms) at 105°C, 120Hz]



- Standard lead style

øD	5.0	6.3	8.0	10.0	13.0	16.0
p	2.0	2.5	3.5	5.0		7.5
ød	0.5		0.6			0.8

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

$$L' = [L + 1.0] \text{Max. at } D \leq 8.0$$

$$L' = [L + 1.5] \text{Max. at } D \geq 10.0$$

W.V Cap(μF)	10		16		25		50	
	SIZE	I <sub>R</sub>	SIZE	I <sub>R</sub>	SIZE	I <sub>R</sub>	SIZE	I <sub>R</sub>
0.47							5x11	8
1.0							5x11	11
2.2							5x11	18
3.3							5x11	22
4.7					5x11	21	6.3x11	29
10					5x11	35	8x11.5	50
22	5x11	44	6.3x11	55	6.3x11	62	10x12.5	85
33	6.3x11	58	6.3x11	70	8x11.5	80	10x16	110
47	6.3x11	75	8x11.5	89	10x12.5	105	10x20	143
100	8x11.5	118	10x12.5	135	10x16	171	13x20	243
220	10x16	190	10x20	252	13x20	310		
330	10x20	245	13x20	320				
470	13x20	330	13x25	410				
1000	16x25	570	16x25	670				

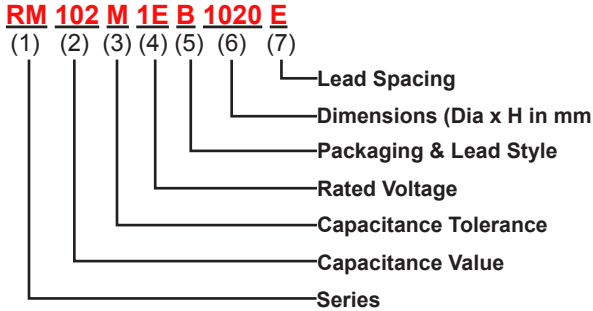
# ORDERING INFORMATION for Leaded Type



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		