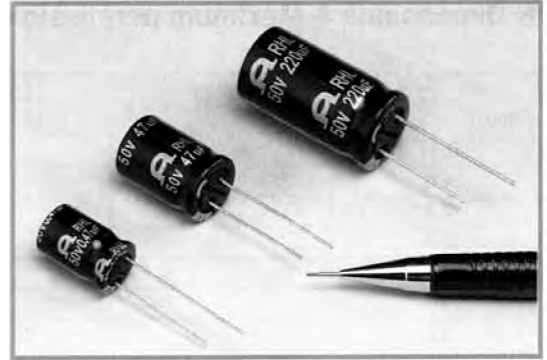


RHL SERIES

125°C High Performance, Radial Leads

Features

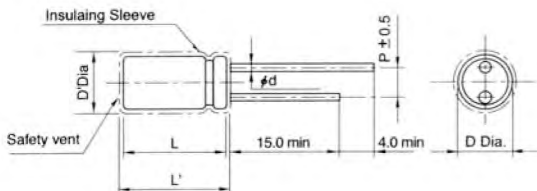
- High temperature, long life (-40°C ~ +125°C)
Radial (Equivalent to 80000 hours life at 85°C)
- Reverse voltage:5V
- Very low leakage current
- Low dissipation factor
- Load life of 5000 hours at 125°C



Specifications

Item	Performance Characteristics						
Operating temperature range	-40°C ~ +125°C						
Rated working voltage range	10V ~ 63V						
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. $I \leq 0.002CV$ or $2\mu A$ (5 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	35	50	63
	Tan δ	0.15	0.12	0.10	0.10	0.08	0.08
Characteristics at low temperature(max.) (impedance ratio at 120Hz)	W.V(V)	10	16	25	35	50	63
	Z-25°C/Z20°C	2	2	2	2	2	2
Load life	Z-40°C/Z20°C	8	6	5	4	4	4
	After applying rated working voltage for 5000 hours at +125°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					
Shelf life	Leakage current	≤ The initial specified value					
	After storage for 1000 hours at +125°C with no voltage applied and then being stabilized at +20°C, capacitors shall meet following limits.						
	Capacitance change	Within ±15% of the initial measured value					
	Tan δ	≤ 150% of the initial specified value					
Leakage current	≤ 500% of the initial specified value						

Dimensions



Standard lead style

φD	10.0	12.5	16.0	18.0
p	5.0		7.5	
φd	0.6		0.8	

D' = [D+0.5]Max.

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

Temperature

Temperature	≤ 85°C	105°C	125°C
Factor	2.0	1.4	1.0



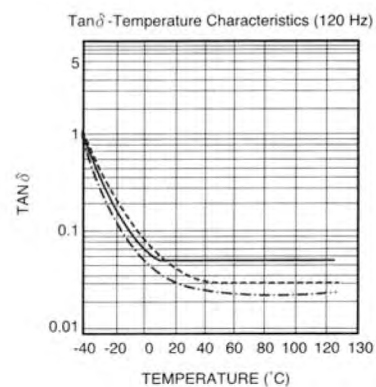
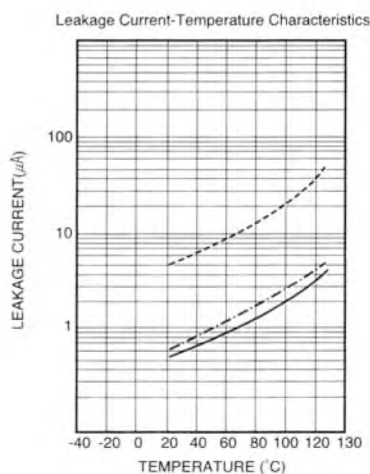
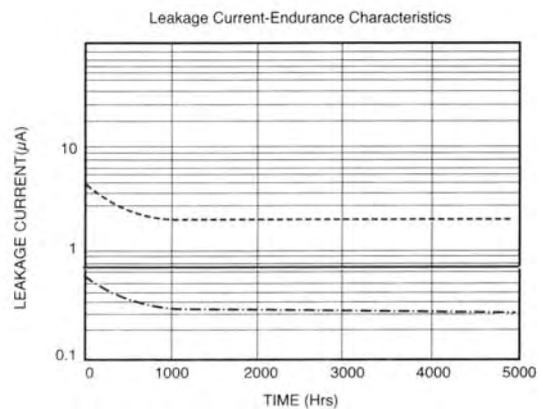
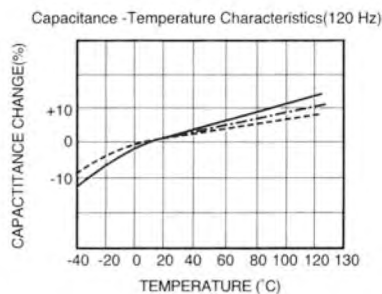
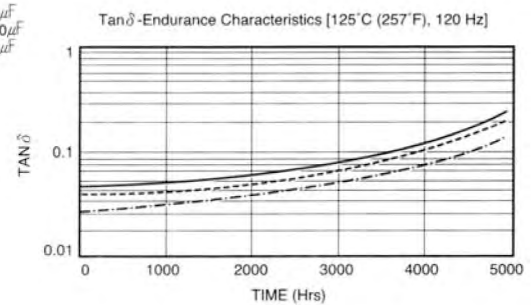
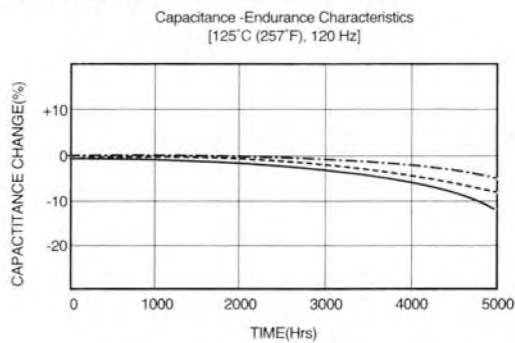
RHL SERIES

Dimensions & Maximum permissible ripple current

Cap(μF)	W.V(V)	φ D x L(mm)											
		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
0.47										10 x 16	11	10 x 16	11
1.0										10 x 16	17	10 x 16	17
2.2										10 x 16	25	10 x 16	25
3.3										10 x 16	31	10 x 16	31
4.7										10 x 16	37	10 x 16	37
10										10 x 16	59	10 x 16	59
22								10 x 16	99	10 x 16	102	10 x 16	102
33						10 x 16	101	10 x 16	130	10 x 20	172	10 x 20	172
47				10 x 16	136	10 x 16	153	10 x 20	187	12.5 x 20	240	12.5 x 20	240
100		10 x 20	176	12.5 x 20	240	12.5 x 20	300	12.5 x 25	330	12.5 x 25	351	16 x 25	351
220		12.5 x 25	320	12.5 x 25	473	16 x 25	513	16 x 25	590	16 x 31.5	633	16 x 35.5	633
330		16 x 25	488	16 x 25	576	16 x 31.5	720	16 x 35.5	776				
470		16 x 25	576	16 x 31.5	790	18 x 35.5	924	18 x 40	1040				
1000		18 x 40	1034										

PERFORMANCE CURVES

I_r: Maximum permissible ripple current[mA(rms) at 125°C, 120Hz]



Professional

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		