

RHVL series

Radial Lead Type

- High Voltage, High Capacitance
- Low ESR, High ripple current
- Load life of 10,000h at 105°C



SPECIFICATIONS

Items	Characteristics	
Temperature range	-55 to +105°C	
Rated voltage range	16 to 50Vdc	
Capacitance range	10 to 1,500μF	
Capacitance tolerance	±20% [M] (at 20°C, 120Hz)	
Tangent of loss angle	Less than or equal to the value of Standard Ratings (at 20°C, 120Hz)	
Leakage current	Less than or equal to the value of Standard Ratings (at 20°C, after 2 minutes)	
ESR	Less than or equal to the value of Standard Ratings	
Characteristics of impedance	Z _{+105°C} /Z _{+20°C} ≤ 1.25, Z _{-55°C} /Z _{+20°C} ≤ 1.25 at 100kHz	
Endurance	105°C, 10,000 hrs at rated voltage	
	Appearance	No significant damage
	Capacitance change	Within±20% of the initial value
	Tangent of loss angle (tanδ)	≤150% of the initial specified value
	ESR(mΩ)	≤150% of the initial specified value
	Leakage current	≤The initial specified value
Damp Heat (Steady State)	60°C, 90 to 95% RH, 1,000 hrs, No-applied Voltage	
	Appearance	No significant damage
	Capacitance change	Within±20% of the initial value
	Tangent of loss angle (tanδ)	≤150% of the initial specified value
	ESR(mΩ)	≤150% of the initial specified value
	Leakage current	≤The initial specified value
Resistance to soldering heat	Flow method (260±5°C, 10s)	
	Appearance	No significant damage
	Capacitance change	Within±10% of the initial value
	Tangent of loss angle (tanδ)	≤130% of the initial specified value
	ESR(mΩ)	≤130% of the initial specified value
	Leakage current	≤The initial specified value

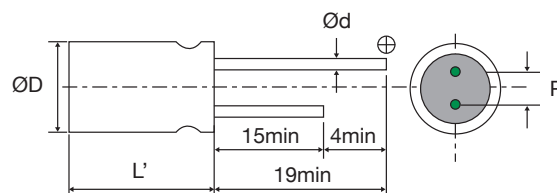
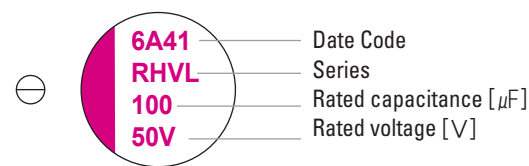
*In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 105°C

SIZE LIST

μF	RV(sv)						(unit: mm)
	16 (18.4)	20 (23)	25 (28.7)	32 (36.8)	35 (40.2)	50 (57.5)	
10						6.3 x 6	
18						8 x 7	
22				6.3 x 6	6.3 x 6	8 x 7	
39					8 x 7	8 x 11.5	
47			6.3 x 6		8 x 7	8 x 11.5	
56			6.3 x 6			8 x 11.5	
68				8 x 7	8 x 7	10 x 11.5	
82			8 x 7		8 x 11.5		
100			8 x 7			10 x 11.5	
120		6.3 x 6		8 x 11.5	10 x 11.5		
150	6.3 x 6				10 x 11.5		
180	6.3 x 6	8 x 7	8 x 11.5				
220		8 x 11.5	8 x 11.5	10 x 11.5	10 x 11.5	10 x 11.5	
270	8 x 7						
330			10 x 11.5				
390		8 x 11.5	10 x 11.5				
470							
560	8 x 11.5	10 x 11.5					
1000	10 x 11.5						
1500	10 x 11.5						

*RV : Rated Voltage [V] SV : Surge Voltage [V] (at room temperature)

MARKING AND DIMENSIONS



Size	ØD±0.5	L	L'	P±0.5	Ød
6.3 x 6	6.3	6	Lmax	2.5	0.45
8 x 7	8	7		3.5	0.45
8 x 11.5	8	11.5	L+1.0max	3.5	0.6
10 x 11.5	10	11.5		5	0.6

(unit: mm)

STANDARD RATINGS

Rated Voltage [Vdc]	Rated Capacitance [μF]	Size Φ D x L [mm]	ESR (20°C, 100kHz) [mΩ] [max.]	Rated Ripple Current (105°C, 100kHz) [mA rms]	Tangent of Loss Angel [max.]	Leakage Current [μA, max.]	Part Number
16	150	6.3 x 6	30	2590	0.12	480	16RHVL150MC6
	180	6.3 x 6	22	3300	0.12	576	16RHVL180MC6
	270	8 x 7	22	3300	0.12	864	16RHVL270MD7
	560	8 x 11.5	14	4950	0.12	1792	16RHVL560MD11
	1000	10 x 11.5	12	5400	0.12	3200	16RHVL1000ME11
	1500	10 x 11.5	12	5600	0.12	4800	16RHVL1500ME11
20	120	6.3 x 6	25	3200	0.12	480	20RHVL120MC6
	180	8 x 7	25	3200	0.12	720	20RHVL180MD7
	220	8 x 11.5	24	3320	0.12	880	20RHVL220MD11
	390	8 x 11.5	14	4950	0.12	1560	20RHVL390MD11
	560	10 x 11.5	12	5400	0.12	2240	20RHVL560ME11
25	47	6.3 x 6	30	2800	0.12	235	25RHVL47MC6
	56	6.3 x 6	30	2800	0.12	280	25RHVL56MC6
	82	8 x 7	28	3000	0.12	410	25RHVL82MD7
	100	8 x 7	28	3000	0.12	500	25RHVL100MD7
	180	8 x 11.5	16	4650	0.12	900	25RHVL180MD11
	220	8 x 11.5	16	4650	0.12	1100	25RHVL220MD11
	330	10 x 11.5	14	5000	0.12	1650	25RHVL330ME11
	390	10 x 11.5	14	5000	0.12	1950	25RHVL390ME11
32	22	6.3 x 6	35	2700	0.12	140	32RHVL22MC6
	68	8 x 7	25	3200	0.12	435	32RHVL68MD7
	120	8 x 11.5	20	4000	0.12	768	32RHVL120MD11
	220	10 x 11.5	18	4650	0.12	1408	32RHVL220ME11
35	22	6.3 x 6	35	2600	0.12	154	35RHVL22MC6
	39	8 x 7	30	2800	0.12	273	35RHVL39MD7
	47	8 x 7	30	2800	0.12	329	35RHVL47MD7
	68	8 x 7	28	3000	0.12	476	35RHVL68MD7
	82	8 x 11.5	20	4000	0.12	574	35RHVL82MD11
	120	10 x 11.5	18	4400	0.12	840	35RHVL120ME11
	150	10 x 11.5	18	4400	0.12	1050	35RHVL150ME11
	220	10 x 11.5	18	4650	0.12	1540	35RHVL220ME11
50	10	6.3 x 6	40	2500	0.12	100	50RHVL10MC6
	18	8 x 7	35	2700	0.12	180	50RHVL18MD7
	22	8 x 7	35	2700	0.12	220	50RHVL22MD7
	39	8 x 11.5	25	3800	0.12	390	50RHVL39MD11
	47	8 x 11.5	25	3800	0.12	470	50RHVL47MD11
	56	8 x 11.5	25	3800	0.12	560	50RHVL56MD11
	68	10 x 11.5	20	4300	0.12	680	50RHVL68ME11
	100	10 x 11.5	20	4300	0.12	1000	50RHVL100ME11
	220	10 x 11.5	25	4650	0.12	2200	50RHVL220ME11

