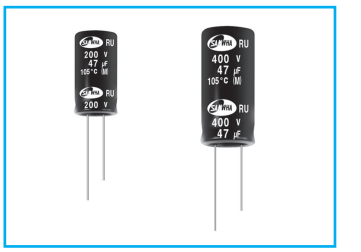
RU

For PSU, High Ripple Current Series

- High ripple current compared with RH series
- High reliability withstanding 5000 hours load life at 105˚C
- Suited for ballast application
- Complied to the RoHS directive

RH ⟹ **RU**
High Ripple



Item	Characteristics
Operating temperature range	WV: 160 ~ 450 — Temperature range: -40 ~ +105˚C WV: 500 — Temperature range: -25 ~ +105˚C
Leakage current max.	I = 0.02CV + 25μA (after 5 minutes)
Capacitance tolerance	±20% at 120Hz, 20˚C
Dissipation factor max. (at 120Hz, 20˚C)	

WV	160	200	250	350	400	420	450	500
tanδ	0.15	0.15	0.15	0.20	0.20	0.20	0.20	0.24

Low temperature characteristics (Impedance ratio at 120Hz)

WV	160	200	250	350	400	450	500
Z-25˚C/Z+20˚C	3	3	3	4	6	6	6
Z-40˚C/Z+20˚C	4	4	4	8	10	10	-

Load life

After an application of DC bias voltage plus the rated AC ripple current for 5000 hours at 105˚C. The measurement shall meet the following limits. The DC voltage plus the peak AC voltage combined must not exceed the rated voltage.

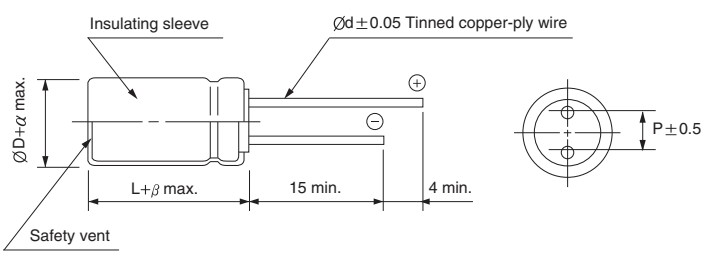
Leakage current	Less than specified value
Capacitance change	Within ±20% of initial value
tanδ	Less than 200% of specified value

Shelf life (at 105˚C)

After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value. The measurement shall be performed at 20˚C by the KS C IEC 60384 - 4

DRAWING

Unit : mm



ØD	10	12.5	16	18	20	22
P	5.0	5.0	7.5	7.5	10.0	10.0
Ød	0.6	0.6	0.8	0.8	0.8	1.0
β	2.0				3.0	
α	0.5				1.0	

FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

μF \ Frequency	120Hz	1kHz	10kHz	50kHz	100kHz≦
~ 8.2	0.30	0.56	0.78	0.90	1.00
10 ~ 47	0.35	0.60	0.80	0.90	1.00
68 ~	0.40	0.65	0.85	0.95	1.00

RU series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF \ WV	160		200		250		350	
6.8					10 × 12.5	250		
10	10 × 16	290	10 × 16	350	10 × 16	350	10 × 20	325
15	10 × 16	340	10 × 16	430	10 × 16	430	10 × 20	360
22	10 × 16	415	10 × 20	525	12.5 × 20	525	12.5 × 20	405
33	10 × 20	580	12.5 × 20	695	12.5 × 20	695	16 × 20	580
47	12.5 × 20	635	12.5 × 20	765	12.5 × 25	835	16 × 25	765
68	12.5 × 25	695	12.5 × 25	880	16 × 20	1000	18 × 25	925
					16 × 25	1065		
82	12.5 × 25	880	16 × 25	1100	16 × 25	1275	18 × 25	985
					18 × 25	1300		
100	16 × 20	1200	16 × 25	1275	18 × 25	1330	18 × 31.5	1180
120	16 × 25	1330	18 × 25	1390	18 × 25	1450	18 × 31.5	1330
150	16 × 25	1450	18 × 25	1500	18 × 25	1550	18 × 40	1450

μF \ WV	400		420		450		500	
3.3					10 × 12.5	180		
10	10 × 16	310	10 × 16	310	12.5 × 20	345	12.5 × 20	345
	10 × 20	325	10 × 20	325				
15	10 × 20	400	10 × 20	450	16 × 20	530	16 × 25	460
22	12.5 × 20	475	12.5 × 20	490	16 × 20	635	16 × 25	490
	12.5 × 25	500	12.5 × 25	520	16 × 25			
33	16 × 25	740	16 × 25	750	16 × 25	810	16 × 31.5	650
					18 × 20			
47	18 × 25	870	18 × 25	890	18 × 25	900	18 × 35.5	810
	16 × 31.5		16 × 31.5		16 × 31.5			
68	18 × 31.5	1020	18 × 31.5	1100	18 × 31.5	1160	18 × 35.5	1040
82	18 × 31.5	1160	18 × 31.5	1200	18 × 31.5	1250	18 × 40	1100
100	18 × 35.5	1300	18 × 35.5	1400	18 × 35.5	1450	20 × 41	1275
120	18 × 40	1450	18 × 40	1600	18 × 40	1620	22 × 45	1800
150	18 × 45	1500	18 × 45	1650	18 × 45	1700		
	20 × 41	1600	20 × 41	1750	20 × 41	1800		

Ripple current (mA rms) at 105°C, 100kHz

Case size ØD×L (mm)